Final
Environmental Impact Statement
for the Hollister Underground Mine Project

Bureau of Land Management

June 2013

BLM

Elko District Office, Tuscarora Field Office, Nevada

BLM Mission Statement

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United States Department of the Interior

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In Reply Refer To:
3809(NVE02000)
NVN-076802

MAY 2 1 2013

Dear Reader:

Enclosed for your review is the Final Environmental Impact Statement (EIS) prepared by the Bureau of Land Management (BLM), Elko District, Tuscarora Field Office for Rodeo Creek Gold Inc.'s (RCG) proposed Hollister Underground Mine Project (Project). This proposal is to transition an underground exploration project to an underground gold and silver mining operation while continuing to conduct underground and surface exploration.

The proposed action also includes the construction of 11.6 miles of electric transmission lines to provide electric power to the proposed mine site. The proposed action would create an additional 117 acres of surface disturbance for a total of approximately 222 acres of surface disturbance for the project. The life of the proposed project is twenty years. The Project is located approximately 47 miles northwest of Elko and 64 miles northeast of Winnemucca in Elko County, Nevada.

The EIS analyzes the direct, indirect, and cumulative impacts associated with the proposed mining development activities. The Final EIS has been prepared in an abbreviated format and must be used in conjunction with the Draft EIS issued in June 2012. Together, the Draft and Final EIS constitute the complete EIS. The Final EIS includes responses to comments received during the public review period on the Draft EIS and updates to the Draft EIS.

Following a 30-day Final EIS availability and review period, a Record of Decision (ROD) will be issued. The decision reached in the ROD is subject to appeal to the Interior Board of Land Appeals. The 30-day appeal period begins with the issuance of the ROD.

Copies of the Hollister Underground Mine Project Draft and Final EIS documents are available in the BLM Elko District Office at the above address, and on line at http://www.blm.gov/nv/st/en/fo/elko_field_office.html.

Sincerely,

Richard E. Adams

Richard E. Adams
Field Manager
Tuscarora Field Office

FINAL ENVIRONMENTAL IMPACT STATEMENT (EIS)
HOLLISTER UNDERGROUND MINE PROJECT

Project Name:	Final Environmental Impact Statement Rodeo Creek Gold Inc. Hollister Underground Mine Project
Lead Agency:	U.S. Department of the Interior Bureau of Land Management Elko District Office, Tuscarora Field Office Elko, Nevada
Cooperating Agencies:	Nevada Department of Wildlife Elko County Board of Commissioners
Project Location:	Elko County, Nevada
Correspondence on this EIS Should be Directed to:	Janice Stadelman, EIS Project Coordinator Bureau of Land Management Tuscarora Field Office 3900 Idaho Street Elko, Nevada 89801

ABSTRACT

The Environmental Impact Statement analyzes potential impacts associated with Rodeo Creek Gold Inc.'s proposal to develop the Hollister Underground Mine Project (Proposed Action). The Proposed Action consists of transitioning from underground exploration activities to a full-scale producing underground gold and silver mine, including continued surface exploration. The Hollister Underground Mine Project is located in the northern end of the Carlin Trend, approximately 47 miles northwest of Elko and 64 miles northeast of Winnemucca, Nevada. The Proposed Action includes underground mining; construction of a shaft, ramp, or raise; haul roads; electric power transmission lines and ancillary facilities; water removal from the underground workings and discharge into Little Antelope Creek and the rapid infiltration basins; backfilling the west open pit with waste rock material; and continued surface exploration. The proposed surface disturbance is 117 acres. The total surface disturbance for the Project is approximately 222 acres. The proposed mine life is 20 years. The agency-preferred alternative is the Proposed Action and Backfill Alternative.

Responsible Official for Final EIS:	Richard E. Adams Field Manager Tuscarora Field Office

Executive Summary

Introduction

Rodeo Creek Gold Inc. (RCG), a wholly owned subsidiary of Great Basin Gold Ltd, proposes to construct and operate the Hollister Underground Mine Project (Project). The proposed Project would include transition of existing underground exploration activities to a full-scale producing underground gold and silver mine, including the development of new facilities and expanded surface exploration. The proposed Project is located in the northern end of the Carlin Trend within Elko County, Nevada, approximately 47 miles northwest of Elko, 38 miles northeast of Battle Mountain, and 64 miles northeast of Winnemucca, Nevada.

Summary of the Proposed Action

RCG is proposing a transition to full-scale underground mine production, an expansion of its existing surface and underground exploration activities, and construction of associated support facilities at the Hollister Site. An amendment to the Plan of Operations (NVN-076802) (RCG 2012) for the proposed Project was submitted to the Bureau of Land Management (BLM). The original Plan of Operations was submitted to the BLM in March 2008.

The Proposed Action would contain the following major components: continued and expanded surface and underground exploration activities; transition from underground exploration and bulk sampling activities to full-scale production of gold and silver underground mining operation; installation of the Hatter Production Shaft, raise, or ramp (collectively referred to as the HPS), as the geology of the area dictates; construction of 11.6 miles of electric power transmission line (transmission line) and a new substation, including access routes; water discharge to Little Antelope Creek per an National Pollutant Discharge Elimination System (NPDES) permit; construction of ancillary support facilities; and continued off-site processing of all ore.

The proposed Project would utilize all of the existing support facilities at the Hollister Site. The anticipated mine life would be approximately 20 years, followed by an estimated 3 years of site closure and reclamation activities. At the end of mine life, RCG would reclaim all the facilities associated with the Project except roads included in the BLM road system. The Proposed Action would result in a total of approximately 117 acres of proposed surface disturbance. As a result, the total surface disturbance for the Project would be approximately 222 acres.

The Project would extract 2.0 to 3.0 million tons of ore and generate 2.6 to 3.7 million tons of waste rock. Underground mining would occur in the Vinini Formation, the host rock that is composed of quartzite, chert, and argillite, and contains the gold and silver veins to be mined under the proposed Project. The underground workings would extend approximately 2,000 feet below ground surface to a bottom elevation of 4,570 feet above mean sea level.

Water would be removed from the underground workings up to a rate of approximately 1,100 gallons per minute (gpm) on a continuous basis for the 20-year mine life. Water then would be pumped to the surface and gravity-fed in an existing buried pipeline to the rapid infiltration basins (RIBs) or to the proposed NPDES discharge point on Little Antelope Creek.

Under the Proposed Action, waste rock would be disposed of in the existing approved RCG Waste Rock Storage Facility, in the West Pit or as backfill in the underground mine workings.

Electric power would be provided by NV Energy through a proposed 120-kilovolt (kV) transmission line to replace current power provided by two generators at the Hollister Site. A new 120-kV overhead line would be routed 5.4 miles from the existing Coyote Creek substation to the proposed Rodeo Creek

substation near the existing east RIB where it would be reduced to 24.9 kV to the mine site. RCG would install the new 24.9-kV distribution line from the proposed substation to the switch gear facility located at the underground mine facilities. These two electric power transmission lines would be permitted under BLM's right-of-way program.

Summary of the Project Alternatives

Four alternatives to the Proposed Action were considered for detailed analysis in the environmental impact statement, which include: Mud Springs Road Transmission Line Alternative; Mud Springs Waste Rock Storage Facility Alternative; Backfill Alternative; and the No Action Alternative. Eight other alternatives were considered but eliminated from detailed analysis.

Summary of Impacts Associated with the Proposed Action and Alternatives

Land Use and Access

The Project area encompasses 10,168 acres, of which 9,301 acres are on public land. The Project is located within the Twenty-Five and Squaw Valley grazing allotments. New Project-related disturbance of 117 surface acres would reduce the amount of land available for livestock grazing and dispersed recreation. However, the area mostly affected by the proposed surface disturbance is currently excluded from grazing and dispersed recreation due to the previously existing open-pit mining operation that is in closure. Post-reclamation land use of most of the disturbance area would be returned to open space, grazing, dispersed recreation, and wildlife habitat.

Access to the area would be similar to present access. Low water crossings may be impacted by the permitted discharge of water into Little Antelope Creek. There would be continued access to the Tosawihi Quarries Archaeological District (Tosawihi Quarries) and Traditional Cultural Properties.

Geology and Minerals

Impacts of the Proposed Action on geologic and mineral resources would include the generation and disposal of about 2.6 to 3.7 million tons of waste rock and the extraction of 2.0 to 3.0 million tons of ore.

The Proposed Action would create limited changes to topography, mostly on pre-existing authorized mining-disturbed and reclaimed land. The existing West Pit would be partially backfilled with waste rock below the rim. Reclamation would result in a final topography resembling the original topography of the area prior to historical surface mining activities.

Groundwater and Geochemistry

Groundwater would be removed from the underground workings within the Vinini Formation to access the gold and silver ore. Under the Proposed Action, groundwater pumping rates in the Vinini Formation would increase from current operation rates of approximately 400 gpm to a maximum rate of approximately 1,100 gpm.

The geotechnical water removal from the proposed Hollister underground workings and the Hatter Expansion would result in lowering the water table in the Vinini Formation. The maximum extent of the 10-foot drawdown contour is predicted to occur approximately 40 years after the cessation of mining and is predicted to extend 7.9 miles from the underground workings, just beyond Antelope Creek to the southeast and just beyond Willow Creek to the northwest. Groundwater drawdown in the Vinini Formation could reduce flows in four spring complexes.

Mining would end after 20 years and groundwater levels would begin to rebound. After rebound, there would be in-situ water quality impacts. The simulated rebound of the water table shows recovery to within approximately 100 feet of the pre-mining water levels approximately 20 years after mine closure in the Hollister Mine area, and 10 years later in the Hatter Expansion area. Ninety-five percent recovery of the water table would occur approximately 30 to 35 years after the end of mine life.

Surface Water Resources and Watersheds

Impacts from groundwater drawdown in the Vinini Formation could include a reduction in flow in four spring complexes and associated spring-derived streamflows on Antelope Creek, Alkali Creek, and Squaw Creek.

Discharges from mine groundwater pumping would increase flow in Little Antelope Creek downstream of the proposed outfall for the life of the mine. No impacts to the existing stability conditions of channels and banks are anticipated.

Soils and Reclamation

The proposed Project would result in 117 acres of surface disturbance that includes potential loss of soil to wind and water erosion, changes in chemical and physical properties, and decreased biological activity. Replacement of growth media is proposed for major disturbances associated with the proposed Project.

Revegetation of disturbance areas would be conducted as soon as practical to minimize impacts to soils and vegetation and facilitate post-mining land uses. A period of overall reclamation monitoring (and maintenance as necessary) is required prior to agency approval of reclamation. Major effects on the desired post-mining, exploration, and transmission line site productivity from soil quality impacts are not anticipated.

Vegetation Resources

The proposed Project would disturb 43.8 acres of sagebrush shrubland, and 65.1 acres of grassland vegetation, and approximately 8.1 acres of disturbed/sparsely vegetated land. The loss of 43.8 acres of shrub-dominated vegetation would represent a long-term impact as it could take up to 25 years following reclamation for mature shrub species to re-establish.

To minimize mine-related impacts to vegetation, reclamation would be conducted as soon as practical, with concurrent reclamation implemented to the maximum extent possible. Satisfactory revegetation of mine-related disturbance areas is anticipated to occur approximately 3 to 15 years following reclamation. After 25 years, the reclaimed plant communities likely would consist of adequate herbaceous plant cover with sufficient diversity to substantially reduce the potential for soil erosion and provide forage for use by livestock and wildlife.

Riparian and Wetland Areas

Continuous discharge of water into Little Antelope Creek temporarily would enhance existing riparian areas and create riparian areas further downstream for the 20-year life of the mine. After water discharge has ended, newly created riparian vegetation may take 3 to 5 years to transition back to upland vegetation, and the riparian vegetation transitions back to pre-discharge conditions.

Groundwater drawdown in the Vinini Formation potentially could reduce flow in four spring complexes and affect approximately 12 acres of wetlands. Based on the projected groundwater drawdown, it is anticipated that approximately 16 wetlands have the potential to be affected by groundwater drawdown in the long term. In addition, reduced flows from springs contributing to Antelope, Alkali, and

Squaw creeks may result in the long-term loss of riparian vegetation. Groundwater flows to springs and seeps potentially impacted by the Proposed Action are projected to recover in approximately 50 to 100 years following initial drawdown.

Construction of the proposed Project would not remove or disturb riparian or wetland areas.

Noxious Weeds and Non-native Invasive Plant Species

Noxious weeds and non-native invasive plant species often invade areas that have been subject to surface disturbance. A decrease or cessation of flow in affected seeps and springs within the maximum extent of the 10-foot groundwater drawdown contour may increase establishment of noxious weeds and non-native invasive plant species known to invade riparian/wetland habitats.

Water-loving noxious weeds and/or non-native invasive plant species have the potential to become established along the margins of Little Antelope Creek due to increased flow from the discharge. Weed monitoring and control practices would be implemented to limit the growth and spread of noxious weeds and non-native invasive plant species and to facilitate successful revegetation with the proposed seed mixes. Weed control practices would follow RCG's existing Noxious Weed Prevention and Control Plan and BLM and Nevada Division of Environmental Protection regulations.

Range Resources

The proposed Project would not result in changes to the existing grazing system. Currently, the area inside the existing mine perimeter fence is excluded from grazing and would continue to be excluded from grazing. The majority of rangeland in the Project area currently utilized for livestock grazing would continue to be available for livestock grazing during the Project mine life.

The potential impacts to the four spring complexes and riparian wetland areas may affect livestock distribution within portions of the Twenty-Five, Squaw Valley, and Tuscarora grazing allotments.

Wildlife

Impacts to mule deer would include the incremental long-term reduction of potential forage and the incremental increase of habitat fragmentation from vegetation removal associated with the proposed Project. A small amount of undisturbed, limited use, and transitional mule deer habitat would be impacted. No mule deer crucial winter habitat would be disturbed as a result of the proposed Project. Impacts to pronghorn would be similar to those previously discussed for mule deer. No pronghorn low density habitat would be disturbed as a result of the proposed Project. Potential impacts to elk would include the incremental long-term reduction of undisturbed low-density habitat and crucial winter habitat within the study area. Given the suitable habitat adjacent to the disturbance areas, these impacts are anticipated to be minor.

Impacts to small game and non-game species would include displacement from the disturbance areas and increased habitat fragmentation, until reclamation has been completed and vegetation is re-established. In most instances, suitable habitat adjacent to disturbance areas would be available for use by these species.

Potential impacts to migratory bird species would include the long-term loss of approximately 117 acres of potentially suitable breeding, roosting, and foraging habitat. However, this temporary loss is expected to have little effect on local bird populations based on the amount of suitable breeding and foraging habitat in the surrounding area.

Generally, transmission lines pose an electrocution hazard for raptor species attempting to perch on the structures. RCG has committed to using Avian Power Line Interaction Committee raptor-deterring

design measures. NV Energy would install antiperching devices on the 120-kV overhead electric transmission line.

Aquatic Biological Resources

Based on groundwater modeling using the maximum extent of the 10-foot drawdown contour, groundwater pumping in the Vinini Formation could reduce flows and water levels in four spring complexes. The effects of reduced flow would be more pronounced in small springs where changes in habitat conditions could represent a substantial portion of the habitat. Flow changes in affected springs could impact the occurrence of invertebrates.

Groundwater pumping also could reduce flow in the wetland areas in Antelope and Squaw creeks. If present, amphibian habitat could be adversely affected by flow and water level reductions. Groundwater pumping also could reduce flows in Antelope Creek and its tributaries, and Squaw and Alkali creeks from reduced flows from affected springs, which could reduce fish and invertebrate densities.

Mine discharge could cause increased temporary flow in Little Antelope Creek, which would create temporary additional aquatic habitat. Stream reaches with increased flow would provide habitat for aquatic macroinvertebrates and possibly nongame native fish species and amphibians that have been observed in nearby drainages. By adhering to the NPDES permit requirements, no adverse effects of water quality on aquatic species would occur in Little Antelope Creek.

Special Status Species

Impacts to special status species would include the temporary (short-term and long-term) reduction or loss of habitat. Short-term impacts arise from habitat removal and disturbance as well as from activities associated with mine operation.

Impacts to some special status species would include the long-term loss of approximately 117 acres of potentially suitable habitat. Based on the limited habitat to be disturbed, and available habitat in the vicinity, potential impacts to these species as a result of the proposed Project would be low.

A long-term loss of approximately 43.8 acres of potentially suitable sagebrush shrubland habitat would potentially impact some special status species. These impacts would be considered low considering the small amount of disturbance and the availability of similar habitat in the study area.

Special status species dependent upon wetlands could be impacted from the loss of 12 acres of wetland and some riparian habitat as a result of groundwater drawdown. These impacts would include loss of available surface water and associated wetland and riparian vegetation. Nine springs within two spring complexes and associated habitat known to contain springsnails could be adversely affected by groundwater drawdown and associated reduction in spring flows.

Based on the results of the noise field measurements, impacts from increased human presence and noise at and near the Hollister Site on special status species and specifically greater sage-grouse is anticipated to be low. This is primarily due to the distance of the active leks in relation to the current Hollister Site, topographic shielding of the leks from the Hollister Site and Ivanhoe Road, and the existing level of human activity at the Hollister Site. Additionally, exploration activities would be prohibited from 1 hour before sunrise until 10 a.m. within 3 miles of a sage-grouse lek during the March 15 to June 15 breeding season.

Paleontological Resources

Direct adverse impacts to fossils could potentially occur from transmission line construction activities conducted on the tuffaceous portions of the Carlin Formation. Indirect impacts during construction could include erosion of fossil beds. It is anticipated that impacts to paleontological resources associated with transmission line construction would be minimal due to the previous surveys confirming that the fossils on the surface within the proposed transmission line corridor were of minimal scientific value.

Underground mining is not likely to affect paleontological resources.

Cultural Resources

Direct impacts to cultural resources could include loss of Historic Properties eligible for listing on the National Register of Historic Places. Avoidance and mitigation would be developed and implemented in accordance with the Programmatic Agreement (PA). To minimize the potential for illegal collection, vandalism, and inadvertent damage, RCG would ensure that all its personnel and contractors are instructed on cultural resources avoidance and protection measures as part of its environmental training program.

Native American Traditional Values

Effects to Native American traditional values include potential direct impacts to Historic Properties, as well as groundwater drawdown impacts to springs. In consultation with the Nevada State Historic Preservation Office and the Tribes, the BLM would determine whether construction and operation of the proposed Project would have an adverse effect on any Historic Properties of traditional religious and cultural importance to the Tribes. If the BLM determines that Historic Properties of traditional religious and cultural importance would be adversely affected, then avoidance or mitigation, if applicable, would be proposed in accordance with the PA. Certain impacts to religious, spiritual, or sacred values and beliefs cannot be monitored or mitigated. If construction or other project personnel discover what might be human remains, then construction would immediately cease and the BLM Authorized Officer would be notified. The inadvertent discovery of human remains would follow the procedures stated in the Native American Graves Protection and Repatriation Act. Four spring complexes potentially would be affected by the proposed Project from groundwater drawdown in the Vinni Formation. Any effects to springs and streams may in turn affect Native American traditional values because of the sacredness of water to the Tribes.

Consultation regarding potential effects to any identified properties of traditional religious and cultural importance and graves/burials, as well as groundwater drawdown impacts to springs, and possible mitigation is ongoing and would continue as long as it is needed. The consultation efforts have included field visits, public scoping, site visits, and interviews conducted for the ethnography report prepared for the proposed Project.

Recreation and Wilderness

There would be a minor reduction in land available for dispersed recreation as a result of the Proposed Action. However, there is an ample supply of alternative public land for dispersed recreational activities in the Project vicinity.

The Project area does not contain any land that meets the criteria for wilderness characteristics or designation. No adverse impacts to designated wilderness or wilderness study areas have been identified.

Air Quality

Modeling results indicate that the proposed Project would not exceed state or national Ambient Air Quality Standards for particulate matter with an aerodynamic diameter of 2.5 microns or less, particulate matter with an aerodynamic diameter of 10 microns or less, oxides of nitrogen, carbon monoxide, and sulfur dioxide for Hollister Mine site operations, ore haul traffic along gravel/dirt roads, or for portable drill rigs. Electric power would be brought in via overhead transmission lines to replace the two generators currently providing power thereby reducing emissions at the Hollister Site.

The combined hazardous air pollutant (HAP) emissions would be less than the major source limit of 25 tons per year (tpy); therefore the Proposed Action would not constitute a major HAP source. Mineral processing of 2 to 3 million tons of ore over the 20-year life of the Project would result in no more than 7.0 pounds of mercury per year at either Esmeralda or Midas mills.

Conservative VISCREEN modeling results for potential visibility impacts from ore processing at Esmeralda Mill indicate that under worst-case conditions, there could be visibility impacts at Yosemite National Park, a Class I area. Based on the complex terrain at the mill site and between the mill site and Yosemite National Park and the local meteorology of the area, it is not likely that emissions from Esmeralda Mill would impact visibility at the national park. Ore processing at Midas Mill would not adversely affect visibility in the nearest Class I area, Jarbidge Wilderness.

Greenhouse gas (GHG) emissions would contribute approximately 25,673 tpy of GHGs for the Proposed Action, assuming all ore was hauled to the Esmeralda Mill. Total GHG emissions would be approximately 18,782 tpy if all ore was hauled to the Midas Mill.

Social and Economic Values

The proposed Project would have a minor long-term effect on the population or demographics of study area that includes Humboldt, Lander, Eureka, and Elko counties.

The local economy would benefit from continuation and a slight increase in current activity for an additional 20 years. In 2009, RCG generated $552,196 in net proceed taxes; $855,728 in sales and use taxes; and $127,295 from ad valorem property taxes. These taxes are expected to increase over the 20-year mine life.

Environmental Justice

The Proposed Action would not be expected to disproportionately affect any particular population. Environmental effects that may occur would affect the study area's population essentially equally without regard to race, ethnicity, or income level. Some Native Americans have stated that they feel disproportionate adverse environmental justice effects.

Visual Resources

Development of the proposed Project would expand the amount of visual contrast that currently exists between existing and previously approved exploration-related facilities and the natural character of the landscape. The proposed Project also would extend visual effects through the use of the area and proposed mining activity. The proposed Project primarily would expand the visual effects in the vicinity of the existing mine area, and would be most prominent during active mining. The visual contrast effects gradually would become less prominent with reclamation. The proposed Project would comply with the Visual Resource Management Class IV objective during active mining and after reclamation because the color contrast and landform contrast would be weak.

Noise

The two currently used generators at the Hollister Site would be replaced by overhead electric line power. However, the generators would be left in place for emergency backup power. All other surface equipment at the mine site would remain the same as current usage. The effect on noise from the Proposed Action would be a reduction in current noise emissions.

Hazardous Materials and Solid Waste

All hazardous substances would be transported by commercial carriers or vendors in accordance with the requirements of Code of Federal Regulations (CFR), Title 49. The probability of a release anywhere along the transportation route, within a populated area, and the probability of a release involving an injury or fatality is minimal.

Based on the facility's design features and the operational practices in place, the probability of a major release occurring at the site during the life of the mine would be low. Any release would be reported and mitigated according to federal and state law.

Energy Requirements, Climate Change, and West Nile Virus

The proposed Project would represent 1.2 percent of the GHG emissions from all sources in the Carlin Trend, approximately 0.04 percent of the emissions in Nevada, and a tiny fraction of the emissions on a global basis. As a result, the proposed Project would be expected to have a negligible effect on climate.

The Proposed Action would not be creating any additional ponds that could increase the likelihood of humans contracting West Nile Virus.

BLM-preferred Alternative

The Council on Environmental Quality Regulations (40 CFR 1502.14e) direct that an EIS "identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference." The BLM has selected alternatives based on the analysis in the EIS. These preferred alternatives are those that best fulfill the agency's statutory mission and responsibilities, considering economic, environmental, technical, and other factors. The BLM has determined the preferred alternatives are the Proposed Action and the Backfill Alternative.

Acronyms and Abbreviations

AAQS	Ambient Air Quality Standards
ACHP	Advisory Council on Historic Preservation
AMEC	AMEC E&I, Inc.
APE	area of potential effect
APLIC	Avian Power Line Interaction Committee
AQOP	Air Quality Operating Permit
BLM	Bureau of Land Management
BMP	best management practice
BMRR	Bureau of Mining Regulation and Reclamation
BSDW	Bureau of Safe Drinking Water
BWPC	Bureau of Water Pollution Control
CEQ	Council on Environmental Quality
CESA	Cumulative Effects Study Area
CFR	Code of Federal Regulations
EIS	Environmental Impact Statement
FONSI	Finding of No Significant Impact
GHG	Greenhouse Gas
gpm	gallons per minute
HAP	hazardous air pollutant
JBR	JBR Environmental Consultants, Inc.
kV	kilovolt
LNG	liquefied natural gas
LTFM	long-term funding mechanism
MACT	Maximum Achievable Control Technology
mm	millimeters
mph	miles per hour
MSHA	Mine Safety and Health Administration
NAAQS	National Ambient Air Quality Standards
NDEP	Nevada Division of Environmental Protection
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act of 1986
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NRS	Nevada Revised Statute

NWI	National Wetland Inventory
PA	Programmatic Agreement
Plan	Monitoring and Mitigation Plan
POD	Plan of Development
ppm	parts per million
Project	Hollister Underground Mine Project
RCE	reclamation cost estimate
RCG	Rodeo Creek Gold Inc
RGM	reactive gaseous mercury
RIB	Rapid Infiltration Basin
ROW	right-of-way
SHPO	State Historic Preservation Office
SWPPP	Storm Water Pollution Prevention Plan
TCP	traditional cultural property
TDS	total dissolved solids
tpy	tons per year
USACE	United States Army Corps of Engineers
WRSF	waste rock storage facility

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1.0 Introduction

The Final Environmental Impact Statement (EIS) for the Hollister Underground Mine Project (Project) contains the updates to the Draft EIS (Chapter 2.0) and a record of the written comments received on the Draft EIS with responses to the substantive comments (Chapter 3.0). References cited are provided in Chapter 4.0.

The Programmatic Agreement (PA) developed for the Project is located in **Appendix A** and defines the manner in which Historic Properties and TCPs will be managed. It is an agreement between the Bureau of Land Management (BLM), State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP) for addressing impacts to Historic Properties. RCG is an invited signatory and certain northern Nevada Tribal and Band governments are invited to be concurring parties. The signatory parties (BLM, SHPO, and ACHP) are entering into this agreement because the effects of the Project on Historic Properties cannot be fully determined prior to the issuance of the decision for this Project. The BLM acknowledges that certain impacts cannot be fully mitigated to the satisfaction of the Western Shoshone Tribes. However, the PA is written to focus on the protection of tangible items, which indirectly can provide protection to intangible items by preventing further damage to Historic Properties. The PA also can provide a means or avenue to allow for various ways of monitoring and mitigation to occur other than routine practices.

The meeting notes summary for the public meeting held July 11, 2012, from 2:00 to 5:00 pm in the Human Development Center in Owyhee, Nevada, is contained in **Appendix B**. It was an open meeting, held with the intent to present information and gather comments on the Draft EIS from the Western Shoshone people living in the vicinity of Owyhee, Nevada.

The Monitoring and Mitigation Plan (Plan) for the Project is contained in **Appendix C**. The Plan describes all of the agreed upon measures to mitigate potential impacts from the Project, and describes the required monitoring.

The Draft EIS for the Project was distributed for public comment on June 1, 2012. The BLM held three public meetings to receive comments during the public comment period, which ended on July 17, 2012 (see Chapter 3.0). None of the comments received during the public comment period required major changes or revisions in the Draft EIS. The Draft EIS has not been reprinted. Therefore, this abbreviated Final EIS must be read in conjunction with the Draft EIS (June 2012). For specific details on impacts to resources, including individual wildlife species, refer to the Draft EIS (June 2012).

2.0 EIS Addendum

This chapter contains specific modifications and updates to the Project Draft EIS published in June 2012. These revisions were made in response to comments received during the 45-day public comment period from June 1 through July 17, 2012. **Table 2-1** identifies the text revisions. Where text has been modified or added, the new text appears in ***bold italic*** print. Deleted text appears with a ~~strikeout line~~ through the text. Revised tables are presented in their entirety following **Table 2-1**.

Rodeo Creek Gold Inc. (RCG) made a slight change to the existing Hollister operations since the Draft EIS was published in June 2012. RCG replaced the two diesel generators that supply electric power for the Hollister operations with two liquid natural gas (LNG)-fired generators. This change in fuel source from diesel to LNG resulted in lower emissions for existing operations. This change also resulted in a minor change in the Proposed Action as the emergency backup power to the proposed overhead electric transmission line would now be provided by LNG-fired generators instead of diesel. The text and tables have been modified accordingly based on this change. No additional air dispersion modeling was performed for the Final EIS based on this change because air emissions would be less than what was predicted in the Draft EIS and emissions would not exceed state and national Ambient Air Quality Standards.

The proposed conversion of power from on-site generators to overhead electrical transmission line would include construction of one transmission line and one distribution line as described in the Draft EIS (Section 2.4.6.1): a 120-kilovolt (kV) transmission line extension from the Coyote Creek Substation located east of the Project Area to the proposed Rodeo Creek Substation, and a 24.9-kV distribution line to bring electrical power from the proposed Rodeo Creek substation to the Hollister Underground Mine area. RCG's right-of-way (ROW) for the 24.9-kV overhead distribution line and substation has been assigned BLM project file number NVN-091723. NV Energy's ROW for the 120-kV overhead transmission line has been assigned BLM project file number NVN-091724. A summary of RCG's Plan of Development (POD) for the 24.9-kV overhead distribution line is provided below. A summary of NV Energy's POD for the 120-kV overhead transmission line also is provided below.

2.4.6.1 (Addendum) Rodeo Creek Gold's 24.9-kV Overhead Distribution Line Plan of Development

RCG applied for a ROW grant for a 24.9-kV overhead distribution line. This ROW project would consist of constructing a 24.9-kV overhead distribution line, a substation located on private land adjacent to Antelope Creek, a switch gear facility located in the Hollister Underground Mine area, and associated access roads and routes. This electric power distribution line would be approximately 6.2 miles long, of which 4.5 miles would parallel Little Antelope Creek Road between the proposed substation located adjacent to Antelope Creek and the proposed switch gear facility located in the Project area, with 1.7 miles of line supplying power to facilities. Electric power would be reduced from the 120-kV overhead transmission line to the 24.9-kV overhead distribution line at the proposed substation (RCG 2012a).

The 24.9-kV distribution line would consist of approximately twenty single wooden poles with wooden double support crossbars. RCG would use Avian Power Line Interaction Committee raptor deterring design measures, which may include but are not limited to, a 60-inch separation between conductors and/or grounded hardware in eagle-use areas as well as the use of insulating or cover-up materials for perch management (RCG 2012a).

A 1-acre temporary construction lay-down (equipment storage) area would be established on private land adjacent to the proposed Rodeo Creek Substation. Existing roads and overland travel would be utilized where possible for construction and maintenance. Access roads would only be constructed as

needed, resulting in approximately 15.2 acres of total disturbance. Access roads may be graveled to maintain a 15-foot-wide roadbed (RCG 2012a).

2.4.6.1 (Addendum) NV Energy's 120-kV Overhead Transmission Line Plan of Development

Land/ROW Requirements for Temporary Construction Activities

NV Energy would require a permanent 90-foot-wide ROW the length of the proposed electric power transmission line corridor. Access to the corridor would be via existing roads, overland travel, and new spur roads that would be constructed from the existing Antelope Creek Road (NV Energy 2012).

Roads

None of the existing roads would be widened; however, they may be graded. Vegetation would be trimmed as necessary to approximately 3 to 6 inches above grade, leaving stems and root systems intact to allow for regrowth. Overland travel would be limited to an average width of 10 feet. Overland travel would involve all necessary construction equipment including track and rubber tired vehicles.

New spur roads would have an average width of 20 feet. Construction would involve light grading in most areas, but may receive extensive blading and side cuts to produce safe and level access. Erosion and sediment control measures would be installed as needed and would abide by BLM's best management practices (BMPs). After transmission line construction is complete, the spur roads would be re-contoured and seeded with a BLM-approved native seed mix (NV Energy 2012).

Transmission Structures

Transmission structure work areas would disturb BLM land and private land. Temporary work pads measuring 150 feet x 150 feet in size would be used for each 2-pole H-frame structure (for the 24.9-kV line); 200 feet x 200 feet pads would be created for each 3-pole structure (for the 120-kV line). Three pull sites 300 feet in diameter would be necessary for conductoring of the line; temporary work pads would fit within the pulling sites. Two staging areas also would be created along the proposed transmission line on private land. Areas would be graded, and soil may be imported to achieve flat surface elevations as necessary along the ROW and temporary work space areas.

All proposed transmission line construction activities would be conducted within the 0.25-mile-wide study corridor where vegetation, wildlife, special status species, cultural resources, and waters of the U.S. (including wetlands) took place (described in Draft EIS Sections 3.12, 3.14, 3.16; and Final EIS Chapter 2.0).

Two holes would be excavated for each 2-pole H-frame structure. Three holes per structure would be excavated for the new 3-pole tap structures. Holes would be 3 feet in diameter and approximately 10 feet deep. In addition, holes for guy wire placement would be excavated at the 3-pole structures. Blasting may be required in rocky areas.

The conductor installed would consist of 397.5 aluminum conductor steel reinforced cable. Three pull sections would accommodate this process, requiring pulling sites on either end. The conductor would be installed onto new transmission structures by a sock line (a small cable used to pull the conductor) attached to the other end of the new conductor and pulled into the travelers using the pulling equipment staged at pulling sites. The line would be installed with a minimum ground clearance of 22 feet (NV Energy 2012).

Post-construction

Post-construction cleanup and demobilization would consist of spreading shredded vegetation previously collected from the cleared ROW as mulch for erosion control. Rocks removed during construction would be redistributed over the ROW to match adjacent site conditions. Previously existing roads that required grading for the transmission line construction would remain improved.

Overland disturbance and new spur roads created by the Project would be reclaimed to preconstruction conditions. Disturbed areas within the ROW and temporary work space areas would be recontoured, decompacted, and seeded with BLM-approved seed mixes (NV Energy 2012).

Long-term Operations and Maintenance Activities

NV Energy operations and maintenance personnel would conduct annual inspections of the line switching facility, and substation by helicopter, all-terrain vehicles, or line trucks. Every 10 years, NV Energy would conduct structure climbing inspections. In addition to inspections, NV Energy personnel also would access the line in the event that maintenance of a structure is required or under emergency conditions. Access to the line would be via existing roads or overland travel (NV Energy 2012).

Proposed Environmental Protection Measures

Pursuant to NV Energy's POD under their ROW application for construction of the transmission line, NV Energy has committed to implementing the following proposed environmental protection measures.

General Measures

All environmentally sensitive areas would be fenced or avoided. Personnel would be instructed regarding the protection of sensitive biological, cultural, and paleontological resources that may occur on site. Vehicle movement would be restricted to the ROW. Non-specular conductors would be installed to reduce visual impacts. All existing roads would be left in equal or better condition than preconstruction.

Soil Disturbance

Where significant grading is required, topsoil would be stockpiled and segregated for later application. Construction would be prohibited when soil is too wet to adequately support construction equipment.

Blasting

Potential rockslide/landslide areas would be avoided whenever possible. Blasts would be designed to minimize ground vibrations that may cause slope instability or impacts to wells and/or springs. Blasting within 500 feet of wells and/or springs would be avoided. All underground utilities would be located and marked prior to blasting to determine their location in relation to the ROW. Proper precautions would be used to minimize or avoid damaging structures or utilities located within 150 feet of blasting operations. Blasting mats would be used to prevent or minimize the amount of rock particles cast into the air following detonation.

Storm Water Management

NV Energy would apply for a storm water permit and would develop a Storm Water Pollution Prevention Plan that incorporates BMPs.

Noxious Weeds and Non-native Invasive Plant Species

Prior to construction, NV Energy would identify all noxious weeds and non-native invasive plant species present on land to be disturbed by construction activities and treat them as required by BLM. All gravel and fill material used would be certified weed-free. All off-road equipment would be cleaned prior to moving on to public land and if in noxious weed and/or non-native invasive plant species infested areas, would be cleaned before moving to a new location. Disturbing areas infested with noxious weeds and non-native invasive plant species would be avoided.

Post-construction, disturbed areas would be re-seeded with BLM-approved native seed mixes; and the NV Energy project area would be monitored annually for 3 years to identify and treat any new infestations of noxious weeds.

Water Features

All construction vehicles and equipment staging or storage as well as construction activities would take place at least 100 feet away from any streams, wetlands, and other water features.

Wildlife and Sensitive Species

Prior to construction, biological surveys of the ROW, access roads, and temporary work spaces would be conducted; potential habitat for listed species identified during surveys would be fenced for avoidance.

Excavations left open overnight would be covered or fenced to prevent livestock or wildlife from falling in. If a sensitive plant or animal species is identified during construction, work near the sensitive species would be halted and a qualified biologist would determine appropriate protective measures.

The new H-frame structure would incorporate perch deterrents in the form of a metal strip 75 millimeters (mm) in height and 3 mm thick, welded to the length of the metal cross arm; and all structures would have pole-top cones installed to prevent raptors from perching on the pole tops.

Cultural and Paleontological Resources

An initial intensive cultural resource inventory survey was completed (described in Draft EIS, Section 3.16.1.7). Prior to construction, all cultural finds within the Project corridor and temporary work spaces would be flagged for avoidance. Workers and individuals involved with the Project would be trained regarding the potential to encounter historic or prehistoric sites and objects, the proper procedures in the event that cultural items or human remains are encountered, prohibitions on artifact collection, and respect for Native American religious concerns. All personnel would be instructed to inspect for paleontological and cultural objects when excavating or conducting other ground-disturbing activities.

During construction, if potential resources are found, work would be halted within a minimum distance of 300 feet from the discovery and a professional archaeologist would be mobilized to the site to determine the appropriate protective measures. If human remains are encountered, BLM and Nevada SHPO representatives would be notified and procedures set forth in 43 CFR Part 10 Native American Graves Protection and Repatriation regulations would be followed as appropriate. Native American human remains discovered on state or private lands would be treated under the provisions of the Protection of Indian Burial Sites section of the Nevada Revised Statues (NRS) in Chapter 383. Procedures for inadvertent discovery are listed under NRS 383.170.

Hazardous Materials and Solid Waste

All construction vehicles would be maintained in accordance with the manufacturer's recommendations and inspected for leaks prior to entering the job site.

All hazardous waste materials would be properly labeled in accordance with Title 40 of the CFR Part 262. Hazardous material storage, equipment fueling and repair would be conducted at least 100 feet away from streams and other water features. Spilled material would be cleaned up immediately. All sanitary waste would be collected and managed in accordance with local requirements.

Air Quality

Driving speeds would be limited to 20 miles per hour (mph) on unpaved roads and on the ROW. All areas subject to ground disturbance would be watered as needed for dust control. Excavation and grading activities would be suspended when winds exceed 25 mph.

Fire Prevention and Response

NV Energy would designate a fire marshal who would coordinate with the BLM's fire management representative, as necessary. This individual would be responsible for conducting regular inspections of tools, equipment, flammable fuel storage areas/handling practices as well as fire inspections along the ROW to confirm compliance with fire prevention measures. The NV Energy fire marshal would remain on duty and on site when construction activities are in progress, would ensure that all workers are aware of all fire protection measures, would report all wildfires in accordance with BLM stipulations, and would initiate fire suppression activities until relieved by agency or local firefighting services in the event of a project-related fire.

Workers would stop or reduce construction activities that pose a significant fire hazard until appropriate safeguards are taken. Fire suppression equipment would be present in areas where construction tools or equipment have the potential to spark a fire. Extra precautions would be taken when fire danger is considered to be high. All field personnel would be instructed regarding emergency fire response.

All flammable material would be cleared a minimum of 10 feet from areas of equipment operation that may generate sparks or flames. All welding or cutting of power line structures or their component parts would be approved by the NV Energy's construction foreman and in areas cleared of vegetation a minimum of 10 feet around the area. All internal combustion engines would be equipped with approved spark arresters. Equipment parking areas and gas/oil storage areas would be cleared of all extraneous flammable materials. Fuel tanks would be grounded. All motorized vehicles and equipment would be equipped with fire protection items (shovel, fire extinguishers, etc.). During periods of increased fire danger, a fire suppression vehicle would be available in the construction area (NV Energy 2012).

3.9.1 (Addendum) Summary Results of Wetland Delineation Report

AMEC E&I, Inc. (AMEC) conducted a field delineation on July 16-20, and August 22, 2012, to identify jurisdictional waters of the U.S., including wetlands, on the approximately 10,168-acre project area (AMEC 2012). The purpose of the delineation was to identify jurisdictional waters of the U.S., including wetlands, which are potentially subject to regulation by the U.S. Army Corps of Engineers (USACE). The waters of the U.S. and wetlands delineation was conducted according to the USACE 1987 Wetland Delineation Manual (Environmental Laboratory 1987), its Arid West Supplement v2 (USACE 2008a), Minimum Standards for Acceptance of Preliminary Wetland Delineations and A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western U.S. (USACE 2008b). The AMEC field delineation performed in 2012 updates the jurisdictional waters determination study performed by JBR Environmental Consultants, Inc. (JBR) in 2003 for the Hollister Development Block Project (JBR 2003a).

Prior to the AMEC field investigation, mapping of the site was reviewed for indications of ephemeral, intermittent, and perennial drainages. The U.S. Fish and Wildlife Service prepared the National Wetlands Inventory (NWI) maps for the area based on air photo interpretation to identify areas dominated by wetland plants. The NWI map does not identify any wetlands within the Project area. During the wetland delineation evaluation, AMEC considered the annual precipitation in the Elko area, a mean of 10.27 inches per year (Western Regional Climate Center 2012).

AMEC surveyed the Project area for indications of waters of the U.S. A total of 36 ephemeral drainage systems depicted characteristics of waters of the U.S. in the Project area. Details of the study,

including photos, NWI maps, and delineation forms are found in the report (AMEC 2012). AMEC's proposed jurisdictional determination is preliminary.

Table 2-1 Modifications and Updates to the Draft EIS

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2.2.7.1	2-13	1-2	all	Two ***liquid natural gas (LNG)-fired*** ~~diesel~~ generators at the Hollister Site provide electric power. ***Each LNG generator*** ~~Generator #1~~ produces approximately ~~2,922~~ ***1,945*** horsepower (hp) (**RCG** ~~2011~~ ***2012a*****)** ~~and Generator #2 produces 2,333 hp~~**.** The two generators and accompanying fuel storage tanks are located on the southwest side of the East Pit (**Figure 2-1**). The generators supply the necessary power for all permitted Hollister operations. On-site fuel storage includes aboveground gasoline and diesel tanks. A 5,000-gallon capacity gasoline tank fuels the light vehicles. ~~Three~~ ***Two*** 10,000-gallon tanks store diesel fuel for the ***backup*** diesel generator~~s~~ and underground mobile equipment.
2.2.8	2-16	Table 2-2	13th row	Methane has been added to Table 2-2, Chemicals Currently Used at Hollister Site. Common Name = ***Liquefied Natural Gas (LNG)***; Quantity =***24,400 gal***; Location = ***Fuel Storage Area***; Area Used = ***LNG Generators***; Rate of Use Per Year = ***2,845,522 gal***; Shipment Quantity = ***12,200 gal***.
2.4.6.1	2-53	1	1-6	Transmission line poles would be wooden with wooden cross-arms. ***Three-pole structures would be used for the 120-kV line, and two-pole H-frame structures would be used for the 24.9-kV line per NV Energy POD (NV Energy 2012). The new H-frame structure would incorporate perch deterrents in the form of a metal strip 75 mm in height and 3 mm thick, welded to the length of the metal cross arm; and all structures would have pole-top cones installed to prevent perching on the pole tops.*** ~~The 120-kV line would be an H-frame (two poles with one wooden cross bar). The 24.9-kV transmission line would have single wooden poles with double support crossbars.~~ RCG would use Avian Power Line Interaction Committee (APLIC) raptor deterring design measures, which may include, but are not limited to, a 60-inch separation between conductors and/or grounded hardware in eagle-use areas as well as the use of insulating or cover up materials for perch management (APLIC 2006).
3.9.3	3.9-9	3		Additional paragraphs to insert after paragraph 3: ***Primary riparian and wetland areas potentially impacted within the cumulative effects study area include the upper and middle reaches of Antelope Creek and supporting spring systems on adjacent hillsides. Information on habitat conditions in these areas was collected by BLM in 2011 (BLM 2011).*** ***The upper reach represents a unique ecological area represented by a complex of springs. Some of these springs support springsnails. Conditions are generally good although impacts from***

Table 2-1 Modifications and Updates to the Draft EIS

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				livestock in the form of trampling and compaction are evident in some locations. The springs occur in a group on a hillside adjacent to the confluence of Squaw and Antelope creeks. Surrounding uplands provide important terrestrial wildlife habitat. The area occurs in a relatively small basin and likely has very high value for wildlife as a result of the complexity and distribution of varied riparian and upland habitat types. Although an old fence surrounds the area, it is in disrepair and livestock are using the spring and adjacent streamside riparian areas. ***The middle reach represents the main stem of Antelope Creek above the confluence of Little Antelope Creek. Although flows are interrupted, riparian habitat conditions are trending upward as a result of changes in livestock grazing patterns and/or favorable climatic conditions. The new floodplain (relative to the historic floodplain which is now a terrace) is situated between cut banks and is sufficiently wide to provide an excellent base for growth and establishment of riparian vegetation. Dominant riparian species include coyote willow, American bulrush and Nebraska sedge. Willow regeneration is excellent in some locations. Livestock use was observed to be slight to light on herbaceous and woody riparian species. Significant infestations of scotch thistle were noted within the floodplain in some areas.***
3.13.1.1	3.13-1	2	2	Based on wetland surveys conducted within the Project area by JBR Environmental Consultants, Inc. (JBR) (2003a), ~~several small areas of perennial flow were identified along Little Antelope Creek~~ there are perennial reaches in Little Antelope Creek (Figure 3.9-1).
3.16.1.1	3.16.1	3	10	. . . Protocol Agreement (signed in 1999 and amended in ~~2009~~ ***2012***) between the BLM and Nevada SHPO. . .
3.16.4	3.16-18	1		Unavoidable adverse effects to known Historic Properties identified within the APE would be mitigated in accordance with the PA~~ and Historic Properties Treatment Plan~~. The BLM, in consultation with SHPO and ACHP, ~~is developing~~ ***would develop*** a mitigation and treatment plan ***as needed,*** that would address identified adverse effects of the project on Historic Properties. Any subsurface archaeological material discovered during construction activities would be treated in accordance with the PA, Applicant committed Environmental Protection Measures and 3809 Regulations. ***The PA includes an avoidance plan to benefit the Tosawihi Quarries Archaeological District and the TCPs. In the event a cultural resource site requires mitigation, the BLM would follow the Section 106 Process, including the BLM policy and guidance and the regulations to perform data recovery or mitigation of a cultural site.*** Per the PA, the BLM, SHPO, Tribes, and Nevada Site Stewards may monitor proposed disturbance

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				and any Historic Properties that remain untreated within or adjacent to the APE. Monitoring of Historic Properties around areas of exploration and mining would be effective in ensuring inadvertent damage would not occur to these properties.
3.17.1.3	3.17-4	Table 3.17-1		See Addendum Table 3.17-1b, Summary of Native American Consultation and Communication.
3.17.4	3.17-13	2		Unavoidable adverse effects to known Historic Properties, as well as sites of tribal importance identified within the APE would be mitigated in accordance with the PA ~~and Historic Properties Treatment Plan~~. Any subsurface archaeological material, including human remains, discovered during construction activities would be treated in accordance with the PA and NAGPRA, if applicable. ***The PA includes an avoidance plan to benefit the Tosawihi Quarries Archaeological District and the TCPs. In the event a cultural resource site requires mitigation, the BLM would follow the Section 106 Process, including the BLM policy and guidance and the regulations to perform data recovery or mitigation of a cultural site.*** Per the PA, the BLM, SHPO, and Tribes may monitor proposed disturbance and any Historic Properties that remain untreated within or adjacent to the APE. Monitoring of Historic Properties, including sites of tribal importance, around areas of exploration and mining would be effective in ensuring inadvertent damage would not occur to these properties. No additional mitigation is recommended.
3.19.1.2	3.19-9	Table 3.19-3		$PM_{2.5}$, Annual Average, Primary ($\mu g/m^3$), ~~15~~ ***12***
3.19.1.2	3.19-10	Table 3.19-3		Source: . . .(USEPA) ~~2010~~ ***2013***.[1]
3.19.2.1	3.19-11	1	12	. . . the Proposed Action, except the existing Hollister site power source, the two ~~diesel~~ ***liquid natural gas-fired (LNG)*** generators . . .
3.19.2.1	3.19-11	1	15	. . . reducing the ***criteria*** emissions associated with the generators.
3.19.2.1	3.19-12	Table 3.19-4		See revised Table 3.19-4, Total Annual Emissions for Proposed Action
3.19.2.1	3.19-13	Table 3.19-5	$PM_{2.5}$	Annual, Percent of NAAQS (%), ~~18.5~~ ***23.3***
3.19.2.1	3.19-13	Table 3.19-6		See revised Table 3.19-6, Stationary Source Emissions for Proposed Action

[1] USEPA 2010 has been superseded and is replaced by USEPA 2013. Modifications to this section are based on USEPA 2013.

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3.19.2.1	3.19-14	1	5	. . . such permits. ***The modeling analyses previously performed included the Hollister Site stationary sources firing diesel fuel. Since these analyses, the Hollister Site diesel-fired engines have been replaced by LNG engines that have lower emissions and similar stack characteristics. Air quality impacts at the Hollister Site were shown to be in compliance with all AAQS when diesel-fired stationary sources were modeled; therefore, it is highly likely that the LNG stationary sources are in compliance with all AAQS and additional modeling is not required.***
3.19.2.1	3.19-14	3	6-8	. . . No Action Alternative ***with all stationary sources firing diesel fuel.*** It is anticipated that impacts for the Proposed Action would be lower due to the reduction of ~~diesel~~ generator emissions ***due to reduced operating hours, as well as*** ~~and~~ the removal of other stationary sources.
3.19.2.1	3.19-14	Table 3.19-7	$PM_{2.5}$	Annual, NAAQS (µg/m^3) ~~15~~***12***, Percent of NAAQS, ~~40~~***50***
3.19.2.1	3.19-14	4	1-3	A modeling analysis was conducted as described in the Air Quality Technical Support Document for comparison to the 1-hour NO_2 NAAQS ***with the emergency generators operating on diesel fuel***. The SCREEN3 predicted maximum impacts from the stationary source emergency generators are shown in Table 3.19-8, and are below the 1-hour NO_2 NAAQS ***and would remain below the NAAQS with the switch to LNG generators.***
3.19.2.1	3.19-15	1	2	Proposed mining operations at the Hollister site would involve combustion of diesel~~, propane, and gasoline,~~ ***and LNG*** all of which contribute CO_2 and other GHG to the atmosphere.
3.19.2.1	3.19-15	2	2	Under the Proposed Action, the ~~diesel~~ ***LNG*** generators at the mine would be decommissioned and would operate fewer than 500 hours per year as emergency power back-up.
3.19.2.1	3.19-15	2	4-5	Stationary sources at the mine then would have the potential to emit about ~~1,342~~ ***743*** tons per year (tpy) of ***direct*** GHG.

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3.19.2.1	3.19-15	2	6	Hauling ore to the Esmeralda Mill for processing would result in additional GHG emissions of about ~~10,515~~***7,635*** tpy, ***resulting in a maximum of 8,378 tpy of direct GHG emissions for the Proposed Action.*** Hollister Mine would require electrical generation by a utility (NV Energy) to supply power to the mine through the proposed 120-kV and 24.9-kV transmission lines. The net effect on GHG emissions from stationary sources would be a net increase from utility supplied electricity. If all of the Hollister Mine ore went to Midas Mill for processing ***instead of the Esmeralda Mill***, the haul trucks have the potential to generate about 744 tpy of ***GHG, resulting in 1,544 tpy of direct GHG emissions.*** ***In addition to direct GHG emissions, under the Proposed Action,*** Hollister Mine would require electrical generation by a utility ***(***NV Energy***)*** to supply power to the mine through the proposed 120-kV and 24.9-kV transmission lines. ***The corresponding indirect GHG emissions from proposed electricity consumption are 17,238 tpy. The total GHG emissions from both direct and indirect sources under the Proposed Action are 25,616 tpy of GHG if all ore were transported to Esmeralda Mill.*** The net effect on GHG emissions ~~from stationary sources~~ ***under the Proposed Action*** would be a net increase ***of 8,508 tpy GHG relative to the No Action Alternative. The increased GHG emissions are*** from utility supplied electricity ***and increased ore hauling activities.*** Section 3.25, Energy Requirements, Climate Change, and West Nile Virus, summarizes the estimated fuel and electrical power consumption for the proposed Project and alternatives.
3.19.2.1	3.19-15	3	1-5	The only Hazardous Air Pollutant (HAP) ***identified as being a potential issue of concern*** ~~that would be emitted due to~~***for*** this project is mercury. ***Other HAPs could be emitted in trace levels from combustion sources including LNG-fired stationary sources, drill rigs, and other mobile equipment. However, the HAPs that would be emitted from these sources are 2 or more orders of magnitude lower than NO_X emissions and are not evaluated further.*** Mined ore containing mercury would be processed at either the . . .
3.19.2.1	3.19-16	Table 3.19-9		See revised Table 3.19-9, Total Annual Emissions for Proposed Action when Ore is Transported to Midas Mill

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3.19.2.1	3.19-16	2	1-4	Based on the total emissions presented in Table 3.19-9, Q would be equal to ~~338.5~~***320.4*** tons. The Jarbidge Wilderness Area is 62 miles (100 km) away which gives a total Q/D of approximately ~~2.10~~**5.17** tons per mile (~~3.39~~***3.20*** tons/km), well below the upper limit of 10. Based on this screening method, the Q/D value of ~~2.10~~***5.17*** tons per mile (~~3.39~~ ***3.20*** tons/km) shows that the emissions from the Hollister Mine would have negligible visibility impacts at the Jarbidge Wilderness Area.
3.19.2.5	3.19-18	1	1	Under the No Action Alternative, the proposed project would not be developed, and the associated air quality impacts would not occur. Under this alternative, the existing Hollister Site would continue to operate under current authorizations~~ with the exception that all diesel-fried stationary sources would be converted to LNG fired sources~~. No exceedences of the applicable national and state AAQS are expected.
3.19.2.5	3.19-19	2	4	Based on these analyses, the modeled concentrations of criteria pollutants are well within the applicable ambient air quality standards ***and are expected to remain that way with the conversion to LNG fired stationary sources***.
3.19.3	3.19-20	Table 3.19-11		See revised Table 3.19-11, Total Annual Emissions for the Proposed Action and Other Sources in the CESA.
3.24.1.2	3.24-3		1st bullet	Any “hazardous substances” or “extremely hazardous substances” as well as petroleum products such as gasoline, diesel, ***liquid natural gas***, or propane, that are subject to reporting requirements…
3.24.1.3	3.24-3	1	1st bullet	***Liquid natural gas***, diesel fuel, gasoline, oils, greases, anti-freeze, and solvents used for equipment operation and maintenance;
3.25.1	3.25-1	2	7	. . . 2.2 million tons ~~or~~ ***(***2.0 million metric tons***)*** of CO_2 per year, ~~is~~ ***are*** from mining . . .
3.25.1	3.25-1	3	2	~~30,768~~***25,616*** tpy (~~27,912~~***23,238*** metric tons per year) of CO_2e GHGs, which. . .is approximately ~~1.4~~***1.2*** percent of the CO_2e GHGs, which . . .
3.25.2	3.25-2	Table 3.25-1		See revised Table 3.25-1, Estimated Fuel and Electrical Power Consumption
3.25.2.1	3.25-4	1	1	The proposed Project would emit approximately ~~30,768~~***25,616*** tpy (~~27,912~~***23,238*** metric tons per year) of . . .
3.25.2.1	3.25-4	3	4-5	The proposed Project represents ~~1.4~~***1.2*** percent of the GHG emissions . . . approximately ~~0.05~~**0.04**

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				percent of CO_2e . . .
Appendix G	AA-1			***LNG = Liquefied Natural Gas***
Appendix G	ES-1	4 (***New***)		***The modeling analyses previously performed included the Hollister Site stationary sources firing diesel fuel. Since these analyses, the Hollister Site diesel-fired engines have been replaced by liquefied natural gas (LNG) engines that have lower emissions and similar stack characteristics. Air quality impacts at the Hollister Site were shown to be in compliance with all NAAQS when diesel-fired stationary sources were modeled; thus, it is highly likely that the LNG stationary sources are in compliance with all NAAQS and additional modeling is not required. Therefore, all results presented in this Appendix are based on modeling conducted for diesel-fired stationary sources, but the impacts from LNG stationary sources are potentially lower.***
Appendix G	ES-1	5	1	The existing Hollister site power source, the two Cummins ~~diesel~~ ***LNG*** generators . . .
Appendix G	ES-1	5	4	. . . emissions associated with the ~~diesel~~ ***LNG*** generators, which will remain on-site . . .
Appendix G	ES-1	9	2	. . . emitted by stationary sources such as the two ~~diesel~~ ***LNG*** generators, would . . .
Appendix G	ES-2	2	5	. . . Additionally, the change from ~~diesel~~ ***LNG*** generated power . . .
Appendix G	1-1	6th bullet	2	. . . replace power provided by two existing ~~diesel~~ ***LNG*** generators;
Appendix G	1-2	3	3	. . . estimated based on the existing air permit. ***Other HAPs could be emitted in trace levels from combustion sources including LNG-fired stationary sources, drill rigs, and other mobile equipment. However, the HAPs that would be emitted from these sources are two or more orders of magnitude lower than NO_X emissions and are not evaluated further.***
Appendix G	2-1	Table 2-1	$PM_{2.5}$	Annual Average, Primary ($\mu g/m^3$), ~~15~~***12***
Appendix G	2-2	Table 2-1	Source:	. . . USEPA ~~2010~~***2013***.
Appendix G	3-1	3	1-6	Stationary sources currently ~~permitted to~~ opera***ting*** ~~at~~ the Hollister Site are listed in Table 3-1. Physical source parameters and the total estimated annual emissions for the No Action Alternative ***used for the modeling analysis*** are shown in Tables 3-2 and 3-3. The ***modeled*** stationary sources ~~for the existing Hollister operations are permitted by BAPC to operate and have~~ demonstrated compliance with applicable NAAQS (RCG 2010, 2009, 2007) ***and current equipment has lower emission rates***.

Table 2-1 Modifications and Updates to the Draft EIS

Draft EIS Section Number	Page	Paragraph[1]	Line(s)	Revised Text
				Therefore, it is not necessary to conduct modeling of the current stationary sources and the impacts of the No Action Alternative would not be evaluated further.
Appendix G	3-1	Table 3-1		See revised Table 3-1, Current Operation of Hollister Site Existing Stationary Sources for the No Action Alternative
Appendix G	3-2	Table 3-2		See revised Table 3-2, Stationary Source Model Input Physical Source Parameters.
Appendix G	3-2	Table 3-3	Title	***Modeled*** Annual Emissions of Hollister Site Stationary Source for No Action Alternative
Appendix G	3-2	2	4	In addition, the existing site power source, the two ~~diesel~~ ***LNG*** generators. . .
Appendix G	3-5	3	1	The existing two Cummins ~~diesel~~ ***LNG*** generators located in the East Pit . . .
Appendix G	3-5	3	3	In addition to the modifications to the ~~diesel~~ ***LNG*** generators, both the . . .
Appendix G	3-5	3	7-11	The total annual emissions for the Proposed Action were ~~calculated from emission rates published in the permit applications~~ ***provided by RCG*** (RCG ***2012b***, 2010, 2009)~~ with adjustments to the annual operating hours for the two generators. In addition, the emissions of CO2 were estimated for the Proposed Action. CO2 emissions were estimated using an emission factor of 1,150.82 lb CO2/hp •hour of operation (USEPA 1996)~~. The horsepower and . . .
Appendix G	3-5	Table 3-4		See revised Table 3-4, Hollister Site Stationary Sources for the Proposed Action
Appendix G	3-6	Table 3-5		See revised Table 3-5, Annual Emissions of Hollister Site Stationary Sources for the Proposed Action
Appendix G	3-6	3	1-3	A modeling analysis was conducted for comparison to the 1-hour NO_2 NAAQS ***using diesel-fired generators. The LNG generators were not modeled because diesel generators represented the worst case.*** Modeled diesel generator emission rates for NO_X are provided in Table 3-6 ***and are compared with the potential emissions of the LNG equipment that would be used for the Proposed Action***. The physical source parameters ***used in the modeling analysis are*** shown in Table 3-2, ~~are assumed to remain the same~~ ***and are similar*** for the Proposed Action.
Appendix G	3-6	Table 3-6		See revised Table 3-6, Modeled Diesel Generator Emission Rates ***Compared with Proposed Action LNG Emission Rates***
Appendix G	3-12	Table 3-17		See revised Table 3-17, Total Annual Emissions (tpy) for the Proposed Action

Table 2-1 Modifications and Updates to the Draft EIS

Draft EIS Section Number	Page	Paragraph[1]	Line(s)	Revised Text
Appendix G	3-12	2	1	The only HAP ~~that would be emitted due to~~ ***identified as a potential concern for*** this project is mercury. ***Other HAPs could be emitted in trace levels from combustion sources including LNG-fired stationary sources, drill rigs, and other mobile equipment. However, the HAPs that would be emitted from these sources are two or more orders of magnitude lower than NO_X emissions and are not evaluated further.*** Mined ore . . .
Appendix G	5-2	3	5-7	. . . 24-hour standards for $PM_{2.5}$. The $PM_{2.5}$ impacts shown in Table 5-2 are for the No Action Alternative ***modeled with diesel-fired equipment*** and the impacts for the Proposed Action would be lower due to the ~~reduction of~~ change from diesel***-fired equipment to LNG equipment and the decreased hours of operation*** ~~generators emissions and other sources~~.
Appendix G	5-2	Table 5-2	$PM_{2.5}$	Annual, NAAQS (µg/m^3), ~~15~~***12***, Percent of NAAQS, ~~40~~***50***
Appendix G	5-2	4	1-3	For the Proposed Action, the only stationary sources that would emit NO_X are the ~~diesel~~ ***LNG*** generators used for backup power. The emergency generator impacts were assessed ***for diesel-fired generators*** at a distance ranging from . . .
Appendix G	5-3	Table 5-3	Title	Table 5-3 Hollister Mine SCREEN3 Model Results for Emergency Generators ***Fired with Diesel Fuel***
Appendix G	5-3	Table 5-4	$PM_{2.5}$	Annual, NAAQS (µg/m^3), ~~15~~***12***, Percent of NAAQS (%), ~~17.9~~***22.5***
Appendix G	5-4	Table 5-5	$PM_{2.5}$	Annual, NAAQS (µg/m^3), ~~15~~***12***, Percent of NAAQS (%), ~~18.5~~***23.3***
Appendix G	5-5	Table 5-6		See revised Table 5-6, Total Annual Emissions for Proposed Action when Ore is Transported to the Midas Mill
Appendix G	5-5	2	1-5	Based on the total emissions of NO_X, SO_2, and PM_{10} presented in Table 5-6, Q would be equal to ~~338.5~~***320.4*** tons. The Jarbidge Wilderness Area is 62 miles (100 kilometers) away which gives a total Q/D of approximately ~~3.39~~***3.20*** tons/km, well below the upper limit of 10. Based on this screening method, the Q/D value of ~~3.39~~***3.20*** tons/km shows that the emissions from the Hollister Site would have negligible visibility impacts at the Jarbidge Wilderness Area.
Appendix G	6-1	1	7-8	The existing Hollister site power source, . . . two Cummins ~~diesel~~ ***LNG*** generators . . .
Appendix G	7-1	13 (***New***)		***Rodeo Creek Gold, Inc. (RCG). 2012b. Update emissions for stationary sources and stack parameters provided by RCG. November 8, 2012 and December 11, 2012.***

Table 2-1 Modifications and Updates to the Draft EIS

Draft EIS Section Number	Page	Paragraph[1]	Line(s)	Revised Text
Appendix G	7-2	1 (***New***)		***United States Environmental Protection Agency (USEPA). 2013. Clean Air Act Sec. 176 (c) (1) United States Environmental Protection Agency: http://www.epa.gov/air/criteria.html/. Accessed February 11, 2013.***

[1] Paragraph number includes the first partial paragraph at the top of the page, if applicable. Paragraph numbering begins anew when a new section number is encountered on a page.

2.1 Updated Tables

Table 3-17b Native American Consultation and Information Sharing Timeline Summary Updates since March 2012

2011 to 2012	The Shoshone-Paiute Tribal Council cancelled several government-to government consultation meetings and/or information sharing meetings scheduled with the BLM Elko District Office, including the Tuscarora Field Office.
September 1, 2011	The BLM sent a copy of the Draft (version August 29, 2011) PA for the Hollister Underground Mine Project to the following Tribal councils for review and comment: South Fork Band Council, Shoshone-Paiute Tribes of the Duck Valley Indian Reservation, Te-Moak Tribe of Western Shoshone, Battle Mountain Band Council, Elko Band Council, Wells Band Council, Ely Shoshone Tribe, Yomba Shoshone Tribe, and Duckwater Shoshone Tribe.
May 9, 2012	The BLM met with the Shoshone-Paiute Tribal Council in Owyhee to discuss and conduct government-to-government consultation on the Hollister Underground Mine Project EIS. The Tribal Council requested a public meeting on the Hollister Underground Mine Project Draft EIS to be held in Owyhee.
May 14, 2012	The Western Shoshone Committee contacted the BLM regarding the status of the Hollister Underground Mine Project EIS.
May 15, 2012	The BLM sent a copy of the Ethnography report completed as supplemental information for the Hollister Underground Mine Project EIS to the Shoshone-Paiute Tribe of the Duck Valley Indian Reservation per their request.
May 15, 2012	A copy of the PA (version dated October 5, 2011) was mailed to the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation for review and comment.
May 16, 2012	The BLM attempted to contact the Western Shoshone Committee via phone call regarding the status of the Hollister Underground Mine Project EIS.
May 25, 2012	The BLM sent a letter to the Shoshone-Paiute Tribal Council responding to some issues discussed during the government-to-government consultation meeting held on May 9, 2012, regarding the Hollister Underground Mine Project EIS.
May 29, 2012 to June 12, 2012	The Tribal Councils, Western Shoshone organizations, and Western Shoshone (individuals) that are listed on the Draft EIS mailing list received copies of the Hollister Underground Mine Project Draft EIS. Draft EIS comment period ended July 16, 2012.
June 1, 2012	The BLM attempted to contact the Battle Mountain Band via phone call to discuss the Hollister Underground Mine Project EIS.
June 7, 2012	The BLM made follow-up phone calls to the Te-Moak, Battle Mountain Band, Elko Band, South Fork Band and Wells Band to discuss the Hollister Underground Mine Project Draft EIS.

Table 3-17b Native American Consultation and Information Sharing Timeline Summary Updates since March 2012

June 11, 2012	The BLM mailed a copy of the Draft PA (version dated October 5, 2011) for review and comment and provided notification of the availability of the Hollister Underground Mine Project Draft EIS to the following Tribal Councils, Western Shoshone organizations, and BIA: Shoshone-Paiute Tribes of the Duck Valley Indian Reservation, Yomba Shoshone Tribe, Ely Shoshone Tribe, Duckwater Shoshone Tribe, South Fork Band Council, Battle Mountain Band Council, Te-Moak Tribe of Western Shoshone, Wells Band Council, Elko Band Council, Confederate Tribes of the Goshute Indian Reservation, Western Shoshone Committee, Western Shoshone Defense Project, Western Shoshone Descendants of Big Smoky, and Bureau of Indian Affairs-Eastern Nevada Agency.
June 27, 2012	The BLM sent a letter to the Shoshone-Paiute Tribal Council responding to some issues discussed during the May 9, 2012, government-to-government consultation on the Hollister Underground Mine Project EIS.
June 29 to July 3, 2012	The BLM talked with the Shoshone-Paiute Tribal Council in Owyhee to schedule a date for a public meeting on the Hollister Underground Mine Project Draft EIS. Meeting was scheduled for July 11, 2012.
July 2, 2012	The BLM received a request to conduct government-to-government consultation on the Hollister PA and Hollister Underground Mine Project EIS from the Duckwater Shoshone Tribe.
July 5, 2012	The BLM received a request to conduct government-to-government consultation on the Hollister PA and Hollister Underground Mine Project EIS from the Goshute Business Council.
July 11, 2012	The BLM held a public meeting on the Hollister Underground Mine Project Draft EIS in Owyhee. Comments were due July 16, 2012 on the Draft EIS.
August 12, 2012	The Western Shoshone Committee contacted the BLM to schedule a field tour to the Tosawihi Quarries. Field tour was scheduled for September 22, 2012.
August 22, 2012	The BLM sent a letter to the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation Tribal Council Chairman regarding scheduling a meeting to conduct government-to-government consultation as requested by the Tribal Council Chairman at the July 11, 2012, Draft EIS public meeting. The BLM suggested some meeting dates in the letter.
August 23, 2012	The BLM sent a letter to the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation Tribal Council Chairman providing a copy of the July 11, 2012, Draft EIS public meeting notes. The BLM suggested the Tribal Council provide the attendees a copy of the notes. The BLM requested edits or additions to the notes by September 24, 2012.
September 12, 2012	The BLM sent a letter to the Duckwater Shoshone Tribe with suggested meeting dates which responded to the Duckwater Shoshone Tribe's request to conduct government-to-government consultation on the Hollister PA and Hollister Underground Mine Project EIS.
September 12, 2012	The BLM sent a letter to the Goshute Business Council with suggested meeting dates which responded to the Goshute Business Council's request to conduct government-to-government consultation on the Hollister PA and Hollister Underground Mine Project EIS.

Table 3-17b Native American Consultation and Information Sharing Timeline Summary Updates since March 2012

September 17, 2012	The Duckwater Shoshone Tribe sent a letter to the BLM that the Council was unavailable on the BLM suggested meeting dates. The letter stated the Duckwater Shoshone Tribe would defer these projects to the Western Shoshone people located in Owyhee, Elko, and Battle Mountain, Nevada.
September 22, 2012	The BLM escorted approximately 18 Western Shoshone people from the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation and Elko Band to the Tosawihi Quarries to discuss the Hollister Underground Mine Project EIS.
October 3, 2012	The BLM met with the Goshute Business Council and provided information on the Hollister Underground Mine Project and the associated PA. After discussing the Project, the Goshute Business Council requested that the BLM coordinate the Project with the Te-Moak Tribe, local bands and the Owyhee-based Shoshone-Paiute Tribes of the Duck Valley Indian Reservation who have traditional ties with the area. The Goshute Business Council declined to conduct government-to-government consultation on the Project, but appreciated the sharing of information on the Project
October 23, 2012	The BLM mailed a copy of the Draft (version dated October 10, 2012) PA for the Hollister Underground Mine Project Draft EIS to the following Tribal Councils, and Western Shoshone organizations, and BIA for review and comment: Shoshone-Paiute Tribes of the Duck Valley Indian Reservation, Yomba Shoshone Tribe, Ely Shoshone Tribe, Duckwater Shoshone Tribe, South Fork Band Council, Battle Mountain Band Council, Te-Moak Tribe of Western Shoshone, Wells Band Council, Elko Band Council, Confederate Tribes of the Goshute Indian Reservation, Western Shoshone Committee, Western Shoshone Defense Project, and Western Shoshone Descendants of Big Smoky.
February 27, 2013	The BLM sent a letter to the South Fork Band Council requesting attendance at the March 5, 2013, Tribal Council meeting in order to share information on several projects including the Hollister Underground Mine Project EIS and PA.
February 27, 2013	The BLM sent a letter to the Elko Band Council requesting attendance at the March 13, 2013, Tribal Council meeting in order to share information on several projects including the Hollister Underground Mine Project EIS and PA. A copy of the PA (2013 final draft version) was distributed for review and comment.
February 27, 2013	The BLM sent a letter to the Wells Band Council requesting attendance at the March 11, 2013, Tribal Council meeting in order to share information on several projects including the Hollister Underground Mine Project EIS and PA. A copy of the PA (2013 final draft version) was distributed for review and comment.
February 27, 2013	The BLM sent a letter to the Te-Moak Tribe of the Western Shoshone requesting attendance at the March 6, 2013, Tribal Council meeting in order to share information on several projects including the Hollister Underground Mine Project EIS and PA. A copy of the PA (2013 final draft version) was distributed for review and comment.
February 28, 2013	The BLM sent a letter to the Yomba Shoshone Tribe requesting attendance at the March 8, 2013, Tribal Council meeting in order to share information on several projects including the Hollister Underground Mine Project EIS and PA. A copy of the PA (2013 final draft version) was distributed for review and comment.

Table 3-17b Native American Consultation and Information Sharing Timeline Summary Updates since March 2012

February/March 2013	The BLM continued to make phone calls in an attempt to contact the Battle Mountain Band Tribal Council and the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation Tribal Council in order to request attendance at their Tribal Council meetings to provide information on the Hollister Underground Mine Project EIS and PA (2013 final draft version).
March 5, 2013	The BLM attended the South Fork Band Tribal Council meeting and provided information on the Hollister Underground Mine Project EIS and PA. A copy of the PA (2013 final draft version) was distributed for review and comment. South Fork Band Council requested to be listed as a consulting party on the PA.
March 6, 2013	The BLM attended the Te-Moak Tribal Council meeting and provided information on the Hollister Underground Mine Project EIS and PA. A copy of the PA (2013 final draft version) was distributed for review and comment.
March 8, 2013	The BLM attended the Yomba Tribal Council meeting and provided information on the Hollister Underground Mine Project EIS and PA. A copy of the PA (2013 final draft version) was distributed for review and comment.
March 11, 2013	The BLM attended the Wells Tribal Council meeting and provided information on the Hollister Underground Mine Project EIS and PA. A copy of the PA (2013 final draft version) was distributed for review and comment.
March 27, 2013	The BLM mailed a copy of the PA (2013 final draft version) to the Elko Band Council, Battle Mountain Band Council, Duckwater Shoshone Tribe, and the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation for review and comment. In the cover letter the BLM also requested attendance at their next Tribal Council meeting in order to provide information on the Hollister Underground Mine Project EIS and PA.
April 8, 2013	The BLM received a letter from the Duckwater Shoshone Tribe regarding the PA. The letter stated that the PA seems to have all the right elements in place.
April 17, 2013	The BLM attended the Elko Band Tribal Council meeting to provide information and discuss the Hollister Mine Project EIS and PA.
April 24, 2013	The BLM attended the Battle Mountain Band Tribal Council meeting to provide information and discuss the Hollister Mine Project EIS and PA.
Month of April 2013	The BLM contacted the Tribal Council for the South Fork Band, Wells Band, Elko Band, Battle Mountain Band, Te-Moak Tribe, Yomba Tribe, Duckwater Shoshone Tribe, Goshute Business Council, and the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation to discuss the PA for Hollister Underground Mine Project.
May 21, 2013	The BLM and Battle Mountain Band have scheduled a field trip to visit the Tosawihi Quarries area and Hollister Site to discuss the Hollister Underground Mine Project and PA.
May-June 2013	The BLM will contact the Tribal Councils and ask them if they would like to sign the PA as a consulting party.

Source: BLM 2013.

Table 3.19-4 Total Annual Emissions for Proposed Action

Emissions Source	Tons per Year (tpy)					
	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$	CO_2
Stationary Sources	~~16.60~~ ***1.50***	~~1.60~~ ***0.36***	~~2.60~~ ***0.004***	~~2.00~~ ***1.86***	~~2.00~~ ***1.86***	~~1,342~~ ***800***
Non-Road Engines (Drill Rig Engines)	15.21	8.07	0.02	0.47	0.47	1,673
Ore Hauling Traffic – All Ore to Midas Mill	2.75	1.23	0.15	298.70	29.95	744
Ore Hauling Traffic – All Ore to Esmeralda Mill	31.90	14.33	1.62	687.77	69.63	~~10,515~~ ***7,635***
Total[1]	~~63.71~~ ***48.61***	~~24.00~~ ***22.76***	~~4.24~~ ***1.64***	~~690.24~~ ***690.10***	~~72.10~~ ***71.96***	~~13,530~~ ***10,108***

[1] For a conservatively high estimate of emissions total emissions are calculated assuming all ore is transported to Esmeralda Mill, and none of the ore is transported to Midas Mill. Therefore, the values in this table do not sum together to provide the total maximum emissions from the Proposed Action.

CO_2 = carbon dioxide.

NO_X = nitrogen oxide.

Table 3.19-6 Stationary Source Emissions for Proposed Action

Unit or Process Description	Tons per Year (tpy)					
	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$	CO_2
LNG Generator, Cummins Model ***QSK60*** ~~G6 2,647~~ ***1,945*** hp[1]; 500 hours/year	~~7.7~~ ***0.75***	~~0.8~~ ***0.18***	~~1.3~~ ***0.002***	~~0.1~~ ***0.03***	~~0.1~~ ***0.03***	~~671~~ ***400.18***
LNG Generator, Cummins Model ***QSK60*** ~~G6 2,647~~ ***1,945*** hp[1]; 500 hours/year	~~8.9~~ ***0.75***	~~0.8~~ ***0.18***	~~1.3~~ ***0.002***	~~0.1~~ ***0.03***	~~0.1~~ ***0.03***	~~671~~ ***400.18***
Shotcrete Batch Plant; 60 tons/hr Process Rate; 8,760 hours/year	0.0	0.0	0.0	1.8	1.8	0.0
Total	~~16.6~~ ***1.5***	~~1.6~~ ***0.36***	~~2.6~~ ***0.004***	~~2.0~~ ***1.86***	~~2.0~~ ***1.86***	~~1,342~~ ***800.36***

[1] ~~Model analyzed. Actual diesel~~ ***Diesel-fired generation equipment*** ~~may be replaced periodically in the ordinary course of operations~~ ***used for modeling analyses has been replaced by cleaner burning*** ~~liquid natural gas-fired~~ ***LNG generators, which result in lower emissions of all pollutants.***

Source: RCG ~~2009b~~ ***2012b***.

Table 3.19-9 Total Annual Emissions for Proposed Action when Ore is Transported to Midas Mill

	Tons per Year					
Emissions Source	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**
Stationary Sources	~~16.60~~ ***1.50***	~~1.60~~ ***0.36***	~~2.60~~ ***0.004***	~~2.00~~ ***1.86***	~~2.00~~ ***1.86***	~~1,342~~ ***800***
Non-road Engines (Drill Rig Engines)	15.21	8.07	0.02	0.47	0.47	1,673
Ore Hauling Traffic	2.75	1.23	0.15	298.40	29.95	744
Total	~~34.56~~ ***19.45***	~~10.90~~ ***9.66***	~~2.77~~ ***0.17***	~~300.87~~ ***300.73***	~~32.42~~ ***32.28***	~~3,759~~ ***3,217***

Table 3.19-11 Total Annual Emissions for the Proposed Action and Other Sources in the CESA

	Tons per year			
Facility	**NO_X**	**CO**	**SO_2**	**PM_{10}**
Hollister Mine Proposed Action[1]	~~63.7~~ **48.6**	~~24~~ **22.8**	~~4.2~~ **1.6**	~~690.2~~ **690.1**
South Operations Area Project Amendment[2]	354	337	276	568
Leeville[2]	0	0	0	0.5
North Operations[2]	0	0	0	93.8
Betze/Post[2]	311	400	996	579
TS Power Plant[2]	1,170	744	1546	598
Total[1]	~~1,898.7~~ **1,882.6**	~~1,505~~ **1,503.8**	~~2,822.2~~ **2,819.6**	~~2,529.5~~ **2,529.4**
Hollister Mine Emissions Percent of Total (%)	~~3.4~~ **2.6**	~~1.6~~ **1.5**	0.1	27.3

[1] Total Emissions are calculated assuming all ore is transported to Esmeralda Mill.

[2] Source: BLM 2010d.

Table 3.25-1 Estimated Fuel and Electrical Power Consumption

Case	Diesel Consumption (gallons)	Diesel Consumption (m^3)	~~Propane~~ *LNG* Consumption (gallons)	~~Propane~~ *LNG* Consumption (m^3)	Power Consumption (kW-hour/year)	Direct GHG (tons/yr) CO_2	Indirect GHG (tons CO_{2e}/yr)[1,2]	Total GHG (tons CO_{2e}/yr)
Proposed Action[3] (Stationary Sources)[4]	~~135,135~~ ***0***	~~511.5~~ 0	~~0~~ ***162,416***	~~0~~ ***614.8***	25,000,000	~~1,342~~ ***800***	17,238	~~18,580~~ ***18,038***
Proposed Action[3] (mobile sources)[5]	687,804	~~2,610.8~~ ***2,603.6***	0	0	0	~~12,188~~ ***7,635***	0	~~12,188~~ ***7,635***
Proposed Action Total	~~822,939~~ ***687,804***	~~3,122.3~~ ***2,603.6***	~~0~~ ***162,416***	~~0~~ ***614.8***	25,000,000	~~13,530~~ ***8,435***	17,238	~~30,768~~ ***25,673***
No Action Alternative (stationary sources)	~~744,851~~ ***72,700***	~~2,819.6~~ ***275.2***	~~0~~ ***2,845,522***	~~0~~ ***10,771.6***	0	~~8,268~~ ***13,824***	0	~~8,268~~ ***13,824***
No Action Alternative (mobile sources)	295,878	1,120.0	0	0	0	~~1,327~~ ***3,284***	0	~~1,327~~ ***3,284***
No Action Alternative Total	~~1,040,729~~ ***368,578***	~~3,939.6~~ ***1,395.2***	~~0~~ ***2,845,522***	~~0~~ ***10,771.6***	0	~~9,595~~ ***17,108***	0	~~9,595~~ ***17,108***

[1] USEPA 2011. Greenhouse Gas Equivalences Calculator accessed May 24, 2011. http://www.epa.gov/cleanenergy/enrgy-resources/calculator.html.

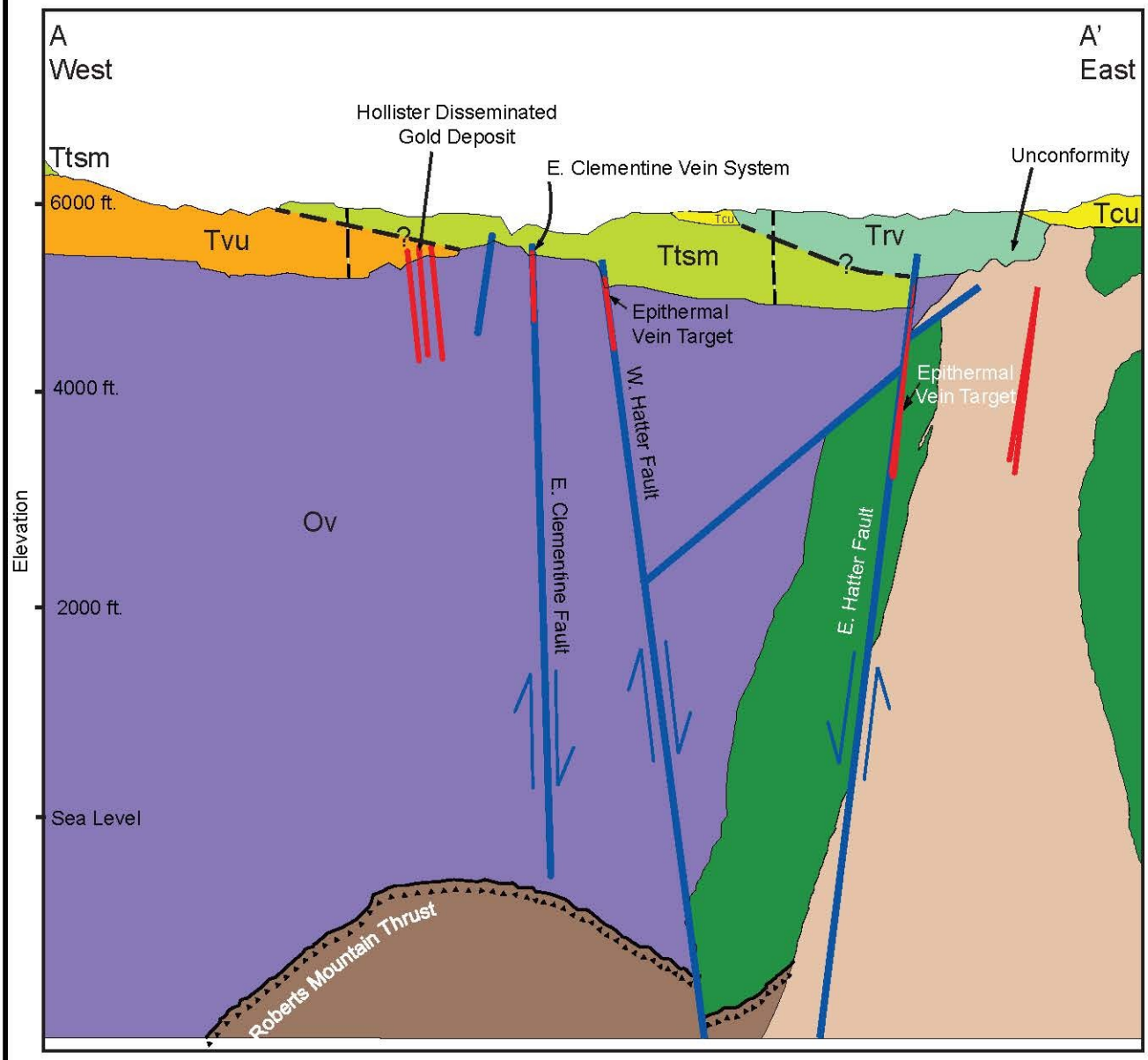
[2] NV Energy would provide electric power to the Hollister Site via the proposed electric power transmission line (transmission line).

[3] Fuel and power consumption and GHG emissions for the Mud Springs Road Transmission Line, Mud Springs Waste Rock Storage Facility, and Backfill alternatives would be similar to the Proposed Action.

[4] Calculations assume 500 hours per year for operation of the generators as backup emergency power.

[5] Calculations assume all ore is transported to the Esmeralda Mill.

Source: RCG ***2013b***, 2010f.



Legend

- Hatter Stock (Eocene)
- Tvu - Tertiary Volcanic Undivided
- Trv- Rhyolite Velvet Area (Miocene)
- Ttsm- Tuffs and tuffaceous sedimentary rocks
- Tcu- Carlin Formation, sedimentary and volcanic rocks, undivided
- Rodeo Creek Unit (Devonian)
- Hornfels Metamorphic Rocks
- Ov - Vinini Formation (Ordovician)
- Veins
- Fault (inferred)
- Fault

Note:The cross-section A-A' is shown on Figure 3.4-1 of the DEIS. Mining disturbance not shown.
Sources: RCG 2011b, Wallace 2003a.

Hollister Underground Mine Project EIS

Figure 3.4-4

Schematic Cross-section of the Hollister Area

05/17/13

Appendix A

Current Hollister Mine Permits and Authorizations

Permit Title and Number	Permit Name	Permitting Agency/Authority	Period Covered/ Renewal Date
N***VN***-77637	GBG Right-of-Way	BLM	December 31, 2019
NVN-76802	***Mine Plan of Operations***	***BLM***	***Submitted to BLM November 2012***[1]
NVN-090354	***MP-381 Right-of-Way***	***BLM***	***December 31, 2021***
Joint Resolution	Humboldt County Road and Landfill	***Humboldt County*** ~~NDOT/NDEP~~	Life of Project
AP1041-~~1298~~ ***3127***	~~Class I~~ ***Class II*** Air Quality Operating Permit (AQOP) [2]	NDEP/Bureau of Air Pollution Control (BAPC)	~~Sept 26, 2008 to Sept 26, 2013~~ ***October 29, 2017***
NEV2003107	Water Pollution Control Permit	NDEP/Bureau of Mining Regulation and Reclamation (BMRR)	~~June 2009 to June 2012~~ ***December 24, 2013***
NEV2003114	Water Pollution Control Permit – Infiltration	NDEP/BMRR	~~April 2009 to April 2014~~ ***April 22, 2014***
#0227	Reclamation Permit	NDEP/BMRR	Life of Project
EL-0349-12NTNC	Permit to Operate a Public Water System	NDEP/***Bureau of Safe Drinking Water (***BSDW***)***	~~May 2011 to June 2012~~ ***June 30, 2013***
EL-0349-TP03	***Permit to Operate a Treatment Plant***	***NDEP/BSDW***	***June 30, 2013***

Current Hollister Mine Permits and Authorizations

Permit Title and Number	Permit Name	Permitting Agency/Authority	Period Covered/ Renewal Date
NVR300000 MSW~~-271~~ ***389***	Storm Water General Permit	NDEP/Bureau of Water Pollution Control (BWPC)	~~June 2007 to June 2012~~ ***February 28, 2018***
GNEVPHT090005	***Wastewater Holding Tanks***	***NDEP/BWPC***	***May 8, 2014***
~~S 29241~~ ***S-35865***	Industrial Artificial Pond Permit	NDOW	~~September 2007 to August 2012~~ ***August 31, 2017***
~~52928-56875~~ ***25345***	Hazardous Materials Storage Permit	Nevada State Fire Marshal	~~February 2012~~ ***February 28, 2014***
Verification Letter	Jurisdictional Determination	USACE	April 27, 2009(3)
~~EL-0349-TP01-12NTC~~	~~Permit to Operate a Treatment Pond~~	~~NDEP/BSDW~~	~~June 2011 to June 2012~~
LOA05HT0001	Holding Tanks	NDEP	April 15, 2011 to May 8, 2014
NV0000349	Public Water System	NDEP/BSDW	June 30, 2009

[1] Modified based on the Hollister Underground Mine EIS.

[2] The Class II AQOP superceded the Class I AQOP (AP1041-1298).

[3] Update in progress (as of August 2012).

Source: ~~RCG 2011b, 2010b~~ ***RCG 2013a***.

Appendix G

Table 3-1 Current Operation of Hollister Site Existing Stationary Sources for the No Action Alternative

Source Number	Unit or Process Description	Engine Rating (hp)	Hours of Operation/Year
S2.001	~~Diesel Generator,~~ ***LNG Generator,*** Cummins Model ***QSK60***	~~2,647~~ ***1,945***	8,760
S2.002	~~Diesel Generator,~~ ***LNG Generator,*** Cummins Model ***QSK60***	~~2,647~~ ***1,945***	8,760
IA1.002	Generator; Night Safety Lighting	20	2,920
IA1.003	Generator 4	140	1,100
IA1.004	Water Pump Engine	140	1,100
IA1.015	Shotcrete Batch Plant	--	8,760

Source: RCG ***2012b,*** 2009.

Table 3-2 Stationary Source Model Input Physical Source Parameters

Source Number	Unit or Process Description	Height (m)	Temperature (°K)	Velocity (m/s)	Diameter (m)
S2.001	***LNG Generator, Cummins Model QSK60***	***5.49***	***755.4***	***87.96***	***0.30***
S2.002	***LNG Generator, Cummins Model QSK60***	***5.49***	***755.4***	***87.96***	***0.30***
IA1.002	Generator; Night Safety Lighting	1.52	840.37	57.73	0.10
~~IAl.003~~	~~Generator 4 - ***REMOVED***~~	~~2.74~~	~~840.37~~	~~77.37~~	~~0.08~~
IA1.004	Water Pump Engine	2.74	840.37	77.37	0.08
IA1.015	Shotcrete Batch Plant	0.00	0.00	0.01	1.00

Source: RCG ***2012b,*** 2009.

Table 3-4 Hollister Site Stationary Sources for the Proposed Action

Source Number	Unit or Process Description	Engine Rating (hp)	Hours of Operation/Year
S2.001	~~Diesel Generator,~~ ***LNG Generator,*** Cummins Model ***QSK60-***~~LNG~~	~~2,647~~ ***1,945***	500
S2.002	~~Diesel Generator,~~ ***LNG Generator,*** Cummins Model ***QSK60-***~~LNG~~	~~2,647~~ ***1,945***	500
IA1.015	Shotcrete Batch Plant	--	8,760

Source: RCG 2012b.

Table 3-5 Annual Emissions of Hollister Site Stationary Sources for the Proposed Action

Source Number	Unit or Process Description	tpy					
		NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$	CO_2
S2.001	~~Diesel Generator,~~ ***LNG Generator,*** Cummins Model ***QSK60-***~~G6~~[1]	~~7.7~~ ***0.75***	~~0.8~~ ***0.18***	~~1.3~~ ***0.002***	~~0.1~~ ***0.03***	~~0.1~~ ***0.03***	~~671~~ ***400.18***
S2.002	~~Diesel Generator,~~ ***LNG Generator,*** Cummins Model ***QSK60-***~~G6~~[1]	~~8.9~~ ***0.75***	~~0.8~~ ***0.18***	~~1.3~~ ***0.002***	~~0.1~~ ***0.03***	~~0.1~~ ***0.03***	~~671~~ ***700.18***
IA1.015	Shotcrete Batch Plant[2]	0.0	0.0	0.0	1.8	1.8	0.0
Total		~~16.6~~ ***1.5***	~~1.6~~ ***0.36***	~~2.6~~ ***0.004***	~~2.0~~ ***1.86***	~~2.0~~ ***1.86***	~~1,342~~ ***800.36***

[1] Assuming 500 hours per year for the Cummins generators as backup emergency power.

[2] Assumes 8,760 hours for the shotcrete plant.

Table 3-6 Modeled Diesel Generator Emission Rates Compared with Proposed Action LNG Emission Rates

Source Number	Unit or Process Description	NO_X (g/s)
S2.001	Diesel Generator, Cummins Model QSK60-G6	3.87
S2.002	Diesel Generator, Cummins Model QSK60-G6	4.47
S2.001	***LNG Generator, Cummins Model QSK60***	***0.38***
S2.002	***LNG Generator, Cummins Model QSK60***	***0.38***

Source: RCG ***2012b,*** 2010.

Table 3-17 Total Annual Emissions (tpy) for the Proposed Action

Emissions Source	Annual Total (tpy)					
	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$	CO_2
Stationary Sources	~~16.60~~ ***1.50***	~~1.60~~ ***0.36***	~~2.60~~ ***0.004***	~~2.00~~ ***1.86***	~~2.00~~ ***1.86***	~~1,342~~ ***800***
Non-Road Engines	15.21	8.07	0.02	0.47	0.47	1,673
Ore Hauling Traffic – All Ore to Midas Mill	2.75	1.23	0.15	298.70	29.95	744
Ore Hauling Traffic – All Ore to Esmeralda Mill	31.90	14.33	1.62	687.77	69.63	~~10,515~~ ***7,635***
Maximum Annual Emissions[1]	~~63.71~~ ***48.61***	~~24.00~~ ***22.76***	~~4.24~~ ***1.64***	~~690.24~~ ***690.10***	~~72.10~~ ***71.96***	~~13,530~~ ***10,108***

[1] For a conservatively high estimate of maximum Annual Emissions, the total emissions are calculated assuming all ore is transported to Esmeralda Mill and none of the ore is transported to Midas. Therefore the values presented in the table for emissions related to ore hauling to Midas Mill are not included in the total "Maximum Annual Emissions" values.

Table 5-6 Total Annual Emissions for Proposed Action when Ore is Transported to the Midas Mill

Emissions Source	tpy					
	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$	CO_2
Stationary Sources	~~16.60~~ ***1.50***	~~1.60~~ ***0.36***	~~2.60~~ ***0.004***	~~2.00~~ ***1.86***	~~2.00~~ ***1.86***	~~1,342~~ ***743***
Drill Rig Engines	15.21	8.07	0.02	0.47	0.47	1,673
Ore Hauling Traffic (Midas Mill)	2.75	1.23	0.15	298.70	29.95	744
Total	~~34.56~~ ***19.45***	~~10.91~~ ***9.66***	~~2.77~~ ***0.17***	~~301.17~~ ***300.73***	~~32.42~~ ***32.28***	~~3,759~~ ***3,160***

3.0 Public Review of the Draft EIS

The 45-day public comment period on the Draft EIS began on June 1, 2012, and ended on July 16, 2012. The BLM received 33 comment letters including 132 comments during the public comment period. **Table 3-1** lists each of the comment letters by respondent, the assigned letter number, and the number of comments per letter.

The BLM held three public meetings on the Draft EIS. The first public meeting occurred at the BLM Battle Mountain District Office in Battle Mountain, Nevada, on June 26, 2012. Three persons signed the attendance record for the public meeting. An additional public meeting was held at the Elko District Office in Elko, Nevada on June 27, 2012. Twelve persons signed the attendance record for the public meeting. A third public meeting was held in Owyhee, Nevada on July 11, 2012; 19 persons signed the attendance record for the public meeting. The meetings in Battle Mountain and Elko were held in an informal open-house format. The meeting in Owyhee at the Human Development Center was conducted more formally with presentations provided by the BLM, RCG, and Terry Gibson, Tribal Chairman of the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation. A summary of the Owyhee public meeting notes is provided in **Appendix B**.

Table 3-1 Summary Table of Public Comment Letters

Letter Number	Commenter	Date of BLM Receipt	Number of Comments
Federal Agencies			
F1	Kristine Hansen, Department of the Army U.S. Army Corps of Engineers	6/12/2012	1
F2	Jared Blumenfeld, U.S. Environmental Protection Agency, Region IX	7/16/2012	35
	F Letter Total		**36**
Nevada State Agencies			
S1	Skip Canfield, Nevada Division of State Lands	7/3/2012	4
S2	Alexi Lanza, Permits Branch, Bureau of Water Pollution Control	6/18/2012	1
S3	Monica Grammenos, Nevada Division of Water Resources	6/18/2012	2
S4	Rebecca Palmer, State Historic Preservation Office	6/20/2012	2
S5	Alan Coyner, Nevada Division of Minerals	7/12/2012	1
S6	John Ellison, Nevada State Assembly	7/14/2012	3
	S Letter Total		**13**
Tribal and Band Governments			
TB1	Buster Gibson, Vice Chairman Shoshone-Paiute Tribes of the Duck Valley Indian Reservation	7/16/2012	17
TB2	Gerald Temoke, Chairman, and Doyle Tybo, Council Member, Elko Band Council	7/16/2012	3
	TB Letter Total		**20**

Table 3-1 Summary Table of Public Comment Letters

Letter Number	Commenter	Date of BLM Receipt	Number of Comments
Non-government Organizations			
N1	Laura Skaer, Northwest Mining Association	7/2/2012	8
N2	Clynne Cook, NV Energy	7/12/2012	2
N3	Ray Bacon, Nevada Manufacturers Association	7/16/2012	3
N4	John Hadder, Great Basin Resource Watch	7/16/2012	9
	N Letter Total		**22**
Tribal Organizations			
TO1	Felix Ike, Western Shoshone Descendants of Big Smoky	7/16/2012	2
TO2	Ilene Premo, Western Shoshone Committee	7/16/2012	3
	TO Letter Total		**5**
Private Individuals			
P1	Jessica Spiegel	6/28/2012	1
P2	Arlene Lunen	6/26/2012	3
P3	John Carpenter (provided at Elko meeting)	6/27/2012	3
P4	Dale Lunen	6/26/2012	2
P5	Ronda Bachtell	7/15/2012	1
P6	Mike Ray	7/14/2012	1
P7	Amy Nelson	7/14/2012	3
P8	Lee Bosch	7/16/2012	1
P9	Annette White	7/16/2012	1
P10	Katrina Maczen Cantrell	7/16/2012	6
P11	Katrina Maczen Cantrell	7/16/2012	1
P12	E. Saldivar	7/14/2012	1
P13	Tim Janke	7/14/2012	1
P14	K. Jeffrey	7/15/2012	1
P15	B. Keith Byer	7/15/2012	4
P16	Jonathan Price	7/16/2012	1
P17	Cindy Premo	7/16/2012	5
	P Letter Total		**36**
Total Comments Received			**132**

Comments received during the public comment period are presented on the following pages, together with the BLM's responses to these comments. Each comment and each response is identified by the letter number and a comment number. Each letter has been reviewed in its entirety and considered by the BLM in preparation of the Final EIS for the Project.

Letter F1

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO ATTENTION OF

June 12, 2012

Regulatory Division (SPK-2003-25109)

Bureau of Land Management
Hollister Underground Mine Project
Janice Stadelman, Project Manager
3900 Idaho Street, Elko, Nevada 89801

Dear Ms. Stadelman:

We are responding to your request for comments on the Hollister Underground Mine project. The project is located in or near Little Antelope Creek, Section 16, Township 37 North, Range 48 East, Mount Diablo Meridian, Latitude 41.0841°, Longitude -116.5584°, north of Carlin, Elko County, Nevada.

The U.S. Army Corps of Engineers' jurisdiction within the study area is under the authority of Section 404 of the Clean Water Act for the discharge of dredged or fill material into waters of the United States. Waters of the United States include, but are not limited to, rivers, perennial or intermittent streams, lakes, ponds, wetlands, vernal pools, marshes, wet meadows, and seeps. Project features that result in the discharge of dredged or fill material into waters of the United States will require Department of the Army authorization prior to starting work.

F1-1 To ascertain the extent of waters on the project site, the Rodeo Creek Gold Incorporated (RCG) should prepare an updated wetland delineation, in accordance with the *Minimum Standards for Acceptance of Preliminary Wetlands Delineations*, (which can be found on our web page at: http://www.spk.usace.army.mil/Missions/Regulatory/Jurisdiction/WetlandDelineations.aspx and clicking on Minimum Standards for Acceptance) and submit it to this office for re-verification.

Please refer to identification number SPK-2003-25109 in any correspondence concerning this project with this office. If you have any questions, please contact me at our Reno Regulatory Field Office, 300 Booth Street, Room 3050, Reno, Nevada 89509, telephone 775-784-5307, or email *Kristine.S.Hansen@usace.army.mil*. For more information regarding our program, please visit our website at *www.spk.usace.army.mil/Missions/Regulatory.aspx*.

Sincerely,

Kristine S. Hansen
Senior Project Manager, Reno Field Office

Letter F1 Response

F1-1 Comment noted. An updated wetland delineation was performed during the summer 2012 (AMEC 2012). In September 2012, the report was submitted to the USACE. A summary of the report is included in the FEIS.

Letter F2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

OFFICE OF THE
REGIONAL ADMINISTRATOR

JUL 16 2012

Amy Lueders
Bureau of Land Management
1340 Financial Boulevard
Reno, Nevada 89520

Subject: Hollister Underground Mine Project Draft Environmental Impact Statement, Elko County, Nevada [CEQ # 20120166]

Dear Ms. Lueders:

The U.S. Environmental Protection Agency (EPA) has reviewed the above referenced document. Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's (CEQ) NEPA Implementation Regulations at 40 CFR 1500 - 1508, and our review authority under Section 309 of the Clean Air Act, as well as the May 21, 2008 Memorandum of Understanding between the Bureau of Land Management (BLM) and EPA.

According to the Draft EIS, the Hollister Underground Mine Project, proposed by Rodeo Creek Gold Inc. (RCG), would disturb 177 acres of land in addition to the 105 acres already disturbed by mining and exploratory activities on the site, and would have an active mine life of approximately 20 years. The proposed project would include the transition from exploration and bulk sampling activities to full-scale production of gold and silver in the existing underground workings and the proposed Hatter production shaft; the construction of an 11.6 mile electrical power transmission line; the installation of a National Pollution Discharge Elimination System (NPDES) permitted outfall for the discharge of dewatering waters; and the placement of waste rock on existing storage facilities as backfill into the underground workings and as partial backfill of the existing West Pit.

F2-1 Based on the information presented in the Draft EIS, EPA believes that some aspects of the project could result in significant degradation of groundwater and surface water quality, including impairment of water quality in jurisdictional Waters of the United States. The Draft EIS states that, following closure of the mine, the rebounding groundwater table would interact with the mine's backfilled underground workings, producing groundwater contamination expected to exceed Nevada Department of Environmental Protection Profile 1 water quality standards for pH (alkaline), aluminum, antimony, chromium, selenium, sulfate, thallium, and total dissolved solids. Should this contaminated groundwater feed surface water features in the project area or impair adjacent groundwater aquifers, which then source surface waters, surface water quality would be further impaired.

F2-2 In addition, the proposed project is anticipated to result in increased flow of an existing contaminated discharge into Little Antelope Creek at seep MA-

Letter F2 Responses

F2-1 Comment noted. Modeling results provided in the DEIS indicate that concentrations of groundwater constituents predicted to exceed groundwater quality standards within the refilled mine workings would eventually flow in the Vinini regional aquifer toward the southwestern Project boundary and attenuate to levels at or below groundwater quality standards within approximately 1.5 miles downgradient of the refilled Hollister Mine underground workings. No receptors (e.g., wells, springs, streams) of groundwater from the Ordovician Vinini aquifer have been identified downgradient of the Hollister Site. Groundwater in the Vinini aquifer at the Hollister Site was 150 to 400 feet lower in elevation than groundwater in the overlying Tertiary volcanic formations prior to any groundwater removal at the Hollister Site. Therefore, water in the two aquifers would not mix. Monitoring and mitigation would be required. See Appendix C, Monitoring and Mitigation Plan. No change to the text of the FEIS has been made to address this comment.

F2-2 Comment noted. Based on both hydraulic and geochemical evidence, groundwater does not flow from the West Pit area toward the MA-1 seep. The underground mine water and groundwater in the Vinini Formation do not interact with Seep MA-1. The Final Monitoring and Mitigation Plan in Appendix C describes the monitoring that would be conducted for Seep MA-1 and Little Antelope Creek. No change to the text of the FEIS has been made to address this comment.

Letter F2 Continued

F2-2 (Cont) 1. This unpermitted discharge into a Water of the United States exceeds NDEP Profile 1 water quality standards for sulfate and total dissolved solids, as well as being elevated in arsenic.

F2-3 EPA believes that following closure of the proposed Hollister Underground Mine, long-term post-closure monitoring and mitigation may be necessary to ensure that the environmental contamination discussed above is limited and water quality standards are met. Based upon experience with other hardrock mines, EPA believes that an appropriate post-closure management strategy may require source controls such as a pump-and-treat system in order to maintain an inflow condition for groundwater into the closed underground workings. The Draft EIS, however, does not contain discussion of long term maintenance and management activities at the site, nor does it provide any projection or estimation of costs for post-closure obligations on the operator. Without this information, EPA is unable to fully assess the potentially significant environmental impacts of the proposed project and whether the project might result in a long term financial liability to the federal government and the American tax payer in the future, e.g., under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

F2-4

EPA has rated the Hollister Underground Mine Project Draft EIS as "EO-3 – Environmental Objections - Inadequate Information" (see Enclosure 1: "Summary of Rating Definitions"). The basis for this rating is summarized below. Our detailed comments on the Draft EIS are enclosed (Enclosure 2).

F2-5 Our objections to the proposed project are based on the likelihood that groundwater and surface water resources would be significantly and adversely affected by the proposed project. The monitoring and mitigation measures proposed in the Draft EIS do not provide sufficient assurance that the potential impacts can or will be mitigated. While the Draft EIS contains a discussion of monitoring efforts as a component of the proposed project, it lacks a detailed discussion of potential mitigating actions in the event that contamination is observed. Without the development of a long term mitigation and management strategy, the proposed project has the potential to result in further exceedance of surface water quality standards.

F2-6 The Draft EIS is inadequate because it does not disclose information regarding the post-closure operations, long term maintenance, or cost estimates. Nor does the Draft EIS discuss how the BLM will ensure that funds will be available as long as they are needed to implement post-closure obligations, including long term treatment and other mitigation measures. The availability of adequate resources to ensure effective reclamation, closure, and post-closure management is a critical factor in determining the significance of the project's potential impacts and its environmental acceptability.

We appreciate the time and effort that you and your staff have devoted to discussing, with EPA, the important larger issues of financial assurance for mining on federal lands. We look forward to informing the national interagency dialogue on this subject in the near future. In the meantime,

F2-7 EPA continues to believe that the adequacy of financial assurance is a critical element to be disclosed during the NEPA process. We believe such disclosure is consistent with CEQ's guidance, which states that all relevant, reasonable mitigation measures that could improve the project are to be identified in an EIS and, to ensure that environmental effects of a proposed

Letter F2 Responses Continued

F2-3 Comment noted. Modeling results provided in the DEIS indicate that concentrations of groundwater constituents predicted to exceed groundwater quality standards within the refilled mine workings would attenuate to levels at or below groundwater quality standards within approximately 1.5 miles downgradient of the refilled Hollister Mine underground workings. No receptors (e.g., wells, springs, streams) of groundwater from the Ordovician Vinini regional aquifer have been identified downgradient of the Hollister Site. The aquifer water level relationship provides evidence that groundwater from the Vinini regional aquifer would not affect water quality in overlying aquifer units within or near the Project area. See the Monitoring and Mitigation Plan (Appendix C).

Pump and treat would be ineffective because the underground workings would continuously refill with water. It also would be impractical to pump and treat for 130 years and not feasible for 400 years. Groundwater quality degradation would be limited to the mine workings within the Project boundaries. No change to the text of the FEIS has been made to address this comment.

F2-4 Comment noted. It is not the BLM's policy to include estimated costs of reclamation or long-term maintenance in National Environmental Policy Act (NEPA) documents. Information on the reclamation cost estimate (RCE) and/or the financial guarantee amount, while public information, is not included in the environmental analysis nor is public comment requested. The RCE and financial guarantee amount are not required components of a complete Plan of Operation but are part of the BLM's enforcement program. The public comment period should focus on the Plan of Operations and the associated environmental analysis (H-3809-1 Surface Management Handbook 9/17/2012; page 4-37 [BLM 2012a]). Reclamation and closure costs are time-sensitive, which is why the BLM Authorized Officer, in accordance with the 43 CFR 3809 regulations, has the authority to review and require cost updates at any time to ensure bond adequacy. In addition, as provided for in 43 CFR 3809.552(c), the BLM Authorized Officer has the authority to require additional bonding and/or a long-term trust.

In accordance with 43 CFR 3809.401(d), the BLM requests a reclamation cost estimate only after processing a complete Plan of Operations or amendment. The BLM recognizes that substantial changes may be made to a proposed Plan of Operations during the NEPA review and analysis process. The BLM establishes trust funds where necessary. The BLM is prohibited from establishing trust funds based on speculative reasons (e.g., the possibility that groundwater may be contaminated if there is no expectation or analysis that

Letter F2 Responses Continued

F2-4 (Cont) groundwater would be contaminated). The BLM policy as stated in the H-3809-1 Surface Management Handbook dated 9/17/2012 (BLM 2012a); page 4-37 and as supported by the Surface Management regulations (43 CFR 3809), does not support the placement of the following information into an environmental impact analysis: 1) RCE calculations, 2) financial guarantee amount, 3) long-term funding mechanism (LTFM) calculations, and 4) LTFM agreements. The BLM does not include reclamation costs in the NEPA process because NEPA requires the agency to analyze potential environmental impacts from a proposed federal action. The reclamation/financial guarantee estimates and LTFMs are a financial assurance should the operator fail to comply with the reclamation requirements and long term maintenance when identified by the BLM Authorized Officer. These estimates are not part of this environmental analysis. No change to the text of the FEIS has been made to address this comment.

F2-5 Comment noted. The DEIS did not identify any surface water quality impacts resulting from the Project. The Final Monitoring and Mitigation Plan is included in Appendix C of the FEIS. No change to the text of the FEIS has been made to address this comment.

F2-6 Comment noted. It is not the BLM's policy to include estimated costs of reclamation or long-term maintenance in NEPA documents. Information on the RCE and/or the financial guarantee amount, while public information, is not included in the environmental analysis nor is public comment requested. The RCE and financial guarantee amount are not required components of a complete Plan of Operations but are part of the BLM's enforcement program. The public comment period should focus on the Plan of Operations and the associated environmental analysis (H-3809-1 Surface Management Handbook 9/17/2012 [BLM 2012a]). Possible reclamation and closure techniques are presented in the DEIS to allow for review and comment on their adequacy. However, technologies change with advances in science and by incorporating knowledge gained from reviewing successes and failures of mines currently in closure. The intent is to allow enough flexibility to accommodate advances in technology expected to occur prior to mine closure in 20 years. Reclamation and closure costs are time-sensitive, which is why the BLM Authorized Officer, in accordance with the 43 CFR 3809 regulations, has the authority to review and require cost updates at any time to ensure bond adequacy. In addition, as provided for in 43 CFR 3809.552(c), the BLM Authorized Officer has the authority to require additional bonding and/or a long-term trust. The BLM routinely reviews the reclamation cost estimate and bond during the life of the Project. The BLM Authorized Officer can require a long-term

Letter F2 Continued

F2-7 (Cont) action are fairly assessed; the probability of the mitigation measures being implemented should also be discussed.[1] We also believe that recent CEQ guidance concerning mitigation may be relevant; this guidance views a discussion of funding for implementation of mitigation commitments as critical to ensuring informed decision making, and suggests that agencies should not commit to mitigation measures if it is not reasonable to foresee the availability of sufficient resources to ensure the performance of the mitigation.[2]

F2-8 We recommend that BLM disclose an estimate of funding for the reclamation and the closure bond, as well as for the long-term funding mechanism for the proposed Hollister Underground Mine project; analyze the adequacy of the funding amount and mechanism, including associated uncertainties to ensure that sufficient funds would be available as long as they are needed;

F2-9 analyze and revise the discussion of potential impacts to, and mitigation measures associated with, water resources, including their anticipated effectiveness; and prepare more detailed monitoring and mitigation plans with established contingencies in the event that the project proponent is no longer financially capable of implementing essential mitigation measures. This information should be circulated in a Supplemental Draft EIS for public comment, in accordance with NEPA and CEQ's NEPA Implementation Regulations. EPA respectfully requests the opportunity to review this information and provide BLM our feedback before you publish the Supplemental Draft EIS.

We appreciate the opportunity to review this Draft EIS and look forward to working with BLM to resolve the issues outlined in this letter. We will call to arrange a meeting with you to discuss plans for completing the NEPA process. In the meantime, if you have any questions, please call me at (415) 947-4238 or have your staff contact Carter Jessop, our lead NEPA reviewer for this project, at (415) 972-3815. Please send a copy of the Supplemental Draft EIS to this office (mail code CED-2) at the same time it is filed with our Washington, D.C. office.

Sincerely,

Jared Blumenfeld
Regional Administrator

Enclosures:
(1) Summary of Rating Definitions
(2) EPA's detailed comments on the Hollister Underground Mine Draft EIS

cc: Ken Miller, BLM Elko District Office
Janice Stadleman, BLM Elko District Office
Colleen Cripps, Nevada Division of Environmental Protection
Alan Jenne, Nevada Division of Wildlife

[1] CEQ, Memorandum for Federal NEPA Liaisons, Federal, State and Local Officials and Other Persons Involved in the NEPA Process, Question 19b, March 16, 1981.
[2] CEQ, *Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact*. 76 Fed. Reg. 3843, 3848-3849 (Jan. 21, 2011).

Letter F2 Responses Continued

F2-6 (Cont) trust be established to address a specified need. Under the 43 CFR 3809 regulations, there is no limitation on the time-frame for the BLM to require monitoring, maintenance, or treatment of facilities at a mine site. No change to the text of the FEIS has been made to address this comment.

A detailed Monitoring and Mitigation Plan is included in Appendix C.

F2-7 Comment noted. The referenced Council on Environmental Quality (CEQ) guidance is applicable to Environmental Assessments, not EISs. The CEQ issued this guidance to ensure that the mitigation actions required to reach a Finding of No Significant Impact in a so-called "mitigated Finding of No Significant Impact (FONSI)" were adequately monitored post-Project approval. The BLM analyzed potential impacts in an EIS because we could not issue a FONSI and we are not relying on mitigation in order to issue a FONSI for the Project. Therefore the referenced CEQ guidance is inapplicable.

In addition, DEIS analyzes the cumulative impacts resulting from the Proposed Action on the environment. Monitoring and mitigation is developed to reduce or eliminate impacts where applicable and feasible. The DEIS discloses when impacts may occur that cannot be mitigated. The DEIS describes when funding for monitoring and mitigation may be utilized. See the Final Monitoring and Mitigation Plan located in Appendix C of the FEIS.

No change to the text of the FEIS has been made to address this comment.

F2-8 Comment noted. The USEPA refers to reclamation bonds and long-term funding mechanisms as "mitigation funds." These funding mechanisms are provided under the BLM's financial guarantee requirements and enforcement program as identified in the 43 CFR 3809 Surface Management regulations and H-3809-1 Surface Management Handbook dated 9/17/2012 (BLM 2012a). Therefore, reclamation bonds and long-term funding mechanisms are not "mitigation funds." The BLM requires and/or applies "mitigation" as defined by the CEQ in 40 CFR 1508.20. CEQ's definition of mitigation does not characterize reclamation bonds or long-term funding mechanisms as "mitigation." The BLM does not agree with USEPA's assertion that the reclamation bond is mitigation. Therefore, in accordance with the BLM policy, the BLM will not be placing this information in the FEIS. Any long term requirements, including the operator's potential long-term liability, will be addressed through the BLM's regulatory authorities as specified in 43 CFR 3809.552(c), the BLM Manual MS-3809 (BLM 2012b) and

Letter F2 Continued

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

Letter F2 Responses Continued

F2-8 (Cont) the 3809 Surface Management Handbook H-3809-1 (BLM 2012a). For a discussion of monitoring, mitigation, and effectiveness see DEIS Sections 3.5.4 and 3.6.4, and the Monitoring and Mitigation Plan in Appendix C.

F2-9 Comment noted. The BLM has determined that the DEIS was prepared in accordance with the CEQ's regulations, and therefore preparing a supplemental DEIS is not required.

Letter F2 Continued

Hollister Underground Mine Project Draft Environmental Impact Statement
EPA Detailed Comments – July 16, 2012

Water Quality and Waters of the United States

Geochemical and groundwater modeling

According to the Draft EIS, in the first 130 years following closure of the Hollister Underground mine site, the rebounding groundwater table would interact with the mine's backfilled underground workings, resulting in significant groundwater contamination within the mine pool. Groundwater would exceed Nevada Department of Environmental Protection (NDEP) Profile 1 water quality standards for pH (basic), aluminum, antimony, chromium, selenium, sulfate, thallium, and total dissolved solids (p. 3.5-35). Following the period of inflow, this initial mine volume of groundwater is projected to migrate down gradient southwest of the mine site. Approximately 400 years after closure of the Hollister Underground Mine, the peak of this contaminated plume is projected to reach the proposed project boundary. According to the Draft EIS, a three dimensional dispersal modeling indicates that dilution, dispersal, attenuation, and other geochemical processes will result in reductions of contaminant concentrations such that only antimony would exceed NDEP Profile 1 values at this point of compliance (Brown and Caldwell, 2012). Based upon this result, the Draft EIS concludes that the contamination of groundwater resources resulting from the proposed project represents no risk to wildlife or human uses and requires no mitigating action.

Geochemical modeling typically encounters a number of uncertainties. With the exception of recognizing uncertainty related to the surface area of waste rock in the underground workings that are likely to be exposed to groundwater, the Draft EIS does not identify or discuss the uncertainties associated with the geochemical modeling for this project. A discussion of the range of potential impacts that could be associated with the modeling results is needed so appropriate closure and post-closure management plans can be developed and committed to now, before the project begins.

One method to assess overall uncertainty or error is to propagate Monte Carlo-generated analytical uncertainties through a geochemical code, and generate probabilistic distributions of the output. A generalized Sensitivity Analysis (GSA) can also be used to separate the model responses into two classes or groups based on specified performance criteria. The relative contribution of the uncertainty associated with each input parameter to the output uncertainty is determined by comparing the cumulative distribution functions of the parameters in the two classes. The combined use of the Monte Carlo method with GSA can be used to examine the significance of analytical and thermodynamic uncertainties.

F2-10 **Recommendation:** The geochemical modeling used in the mine pool predictions of groundwater quality should include a Monte Carlo or similar type sensitivity analysis of a full-range of potential inputs and outcomes. The Supplemental Draft EIS should identify and thoroughly discuss the uncertainties in the geochemical modeling and the range of potential impacts to groundwater quality.

Letter F2 Responses Continued

F2-10 Comment noted. The PHREEQC geochemical model assumptions and calculations are clearly identified in Appendix B3, Geochemical Model Report, of the DEIS. The range of potential impacts was sufficiently addressed by modeling two scenarios for mine wall rock and waste rock surface area, 5.411 m2/L and 54.11 m2/L, a 10-fold difference as explained in Appendix B3. Uncertainties with respect to the geochemical modeling are adequately discussed in the geochemical modeling report (DEIS, Appendix B3), including the effects related to the presence of inorganic carbon in the regional aquifer. The geochemical modeling report identifies the numerous elements of conservatism that are included in the model. It is not reasonable to identify all uncertainties. As stated in the DEIS, the model would be updated with new information as the Project progresses.

The 10-fold range in surface areas modeled for estimating the chemistry of mine water at steady state covers the range of possible inputs for Monte Carlo simulation. There would be no analytical advantage to adding the time and cost for Monte Carlo simulations. No change to the text of the FEIS has been made to address this comment.

Letter F2 Continued

Impacts resulting from contamination of the Vinini formation aquifer

EPA is concerned that historic and proposed mining and exploration activities may have already jeopardized the integrity of the clay barrier or aquitard that previously prevented movement of water between the Vinini formation aquifer, the volcanic aquifer above it, and the shallow perched aquifer underlying the existing open pit areas. Should groundwater move between the various aquifers at the site, Vinini formation groundwater would introduce high levels of contamination to the other aquifers, which would likely then convey this contamination into seeps, springs and surface water bodies.

F2-11

Recommendation: The Supplemental Draft EIS should discuss how the proponent will ensure there is no flow between the contaminated Vinini aquifer in the project area and the groundwater aquifers above it despite the numerous locations where the clay aquitard has been pierced.

Contaminated groundwater from the mine pool has the potential to enter seeps, springs and creeks if they receive flow contributions from the Vinini aquifer or if Vinini aquifer waters contaminate an overlying groundwater body that contributes to surface flows. According to Section 3.6, lower reaches of Little Antelope Creek are believed to gain groundwater baseflow contributions through the summer months during years of average or above average precipitation (p. 3.6-8). Although the aquifer that contributes these base flows is apparently unknown, should these flows be contributed by the Vinini aquifer or an aquifer contaminated due to mixing with Vinini formation waters adjacent to the project site, Little Antelope Creek and/or the Rock Creek watershed may have reduced water quality. Likewise, should Vinini formation groundwater overflow the mine portal, conveyance of contaminated groundwater into surface waters adjacent to the project site is likely. In conversations with EPA staff, BLM staff has characterized this as a "worst case scenario". Given the site specific conditions at the Hollister Underground Mine and the complex groundwater interactions that may take place, EPA believes that such a release of contaminants is a foreseeable possibility.

F2-12

Recommendation: The Supplemental Draft EIS should provide plans for responding to each of the potential sources of water quality contamination from the proposed project, including:

- Interim (emergency) Response Plan
- Fluid Stabilization and Management Plan
- Closure Water Management and Treatment Plan
- Post-Closure Water Management and Treatment Plan

The response plans should address the proposed mitigation measures and provide contingency plans in the event that mitigation fails to be fully effective. The response plans should include monitoring plans that address continual calibration of the information using real-time site specific data. This should include: a trend analysis and additional monitoring to provide assumption and/or model feedback prior to any actual exceedance occurring; monitoring of mine pool and monitoring wells located between mine pool and point of compliance well; and monitoring of waste rock storage facility seepage collected in wet well to measure dolomite neutralization effectiveness. The

Letter F2 Responses Continued

F2-11 Comment noted. Groundwater in the Vinini Formation currently does not flow up into adjacent formations in the Project area due to the alteration of the overlying volcanic units as explained in Section 3.5, Groundwater Resources and Geochemistry, of the DEIS. Groundwater removal from the Vinini Formation is creating a downward gradient as water descends to fill the void. Outside the Project area, communication between aquifers, should it exist, does not pose a water quality issue.

Proper well abandonment is employed to ensure that water within the Tertiary volcanic rock hosted aquifer does not flow downward through piercements in the clay aquitard. The Nevada Administrative Code (NAC) 534.4371 Regulations administered by the Nevada Division of Water Resources describes the hole plugging requirements. No change to the text of the FEIS has been made to address this comment.

F2-12 Comment noted. Degradation of water quality in the Vinini Formation would be limited to the project area, as discussed in (DEIS, Section 3.5, pages 3.5-34 through 37). There is no demonstrated connection between Vinini groundwater and surface water features within the project area. The baseline groundwater elevation before groundwater pumping began was below the mine portal elevation. Therefore, it is not possible for water from the mine workings to flow out through the mine portal.

Seeps, springs and creeks do not receive flow contributions from the Vinini aquifer at any location downgradient of the proposed Hollister Mine. Groundwater from the Vinini aquifer cannot flow upwards into the overlying Tertiary volcanic-hosted aquifer. The Tertiary volcanic rock units overlying the Vinini Formation are several hundred feet thick (DEIS, Section 3.5.1.1). Any base flow that may occur along Little Antelope Creek is contributed by one of several volcanic rock units in this area, not by the Vinini aquifer. Rock Creek is 7 miles downgradient of the proposed Hollister Mine, far beyond the 1.5-mile-diameter modeled extent of Vinini aquifer contamination, and is underlain by extensive Tertiary volcanic rock units. The water level elevation in the Vinini aquifer prior to any groundwater removal was approximately 150 feet below the mine portal; there are no plausible mechanisms for the groundwater elevation in the Vinini regional aquifer to overflow the mine portal. The site-specific conditions at the proposed Hollister Mine are mis-characterized in this comment, and release of contaminants is not a foreseeable possibility.

The Final Monitoring and Mitigation Plan identified in Appendix C addresses water quality issues. Table 1-1 and Appendix A (DEIS, Section 1.3) further identify required state permits relevant to this

Letter F2 Continued

F2-12 Cont

monitoring plans should provide performance standards upon which to base mitigation triggers that would ensure prevention (e.g. prior detection and mitigation) of any exceedance at either a point of compliance or NPDES discharge location.

Potential for waste rock seepage

The proposed project includes the placement of a wet well/sump under the waste rock storage facilities (WRSF) with water collecting at the synthetic liner underlying the waste rock, to be pumped to water treatment facilities prior to discharge. The leachate data from the active WRSF represents the best opportunity for a direct site analog relative to the existing and proposed material handling mitigation measures (e.g. amendment with dolomite). Site analogs provide site-specific real-time data that can be more accurate in predicting water quality impacts than conceptual modeling based on limited data. Infiltration that has made its way through the existing WRSF and, subsequently, through the dolomite layer and collected in the sump should be representative of future leachate volumes and concentrations from the existing and new WRSF, and indicative of whether treatment will be required. The Draft EIS indicates that, because sump water is presently being sent to the reverse osmosis plant, it has required treatment for contaminants in the past. The Draft EIS contains no information, however, in regards to the water quality of this leachate.

F2-13

Recommendation: The Supplemental Draft EIS should include water quality and quantity data for the leachate collecting at the synthetic liner under the existing WRSF. It should include a discussion of whether the data supports the laboratory results used in the preparation of the Draft EIS and the potential environmental consequences of any identified discrepancy.

Impacts resulting from discharge at seep MA-1

Sections 3.4 and 3.6 of the Draft EIS provide descriptions of seep MA-1, which discharges into Little Antelope Creek from the Newmont-reclaimed East Waste Rock Storage Facility. Seep MA-1 currently contains elevated levels of arsenic, sulfate, and total dissolved solids (TDS), with sulfate and TDS being above NDEP Profile 1 reference values. Based upon the information presented in the Draft EIS, it seems likely that seep MA-1 receives contributions from the shallow perched aquifer under the previously disturbed operations areas. Under the proposed action, development of the West Pit WRSF and placement of backfill would raise the ground surface in the West Pit and preclude the continued formation of the seasonal pit lake that has in the past occurred approximately 9 months of each year. The removal of this groundwater sink for the perched aquifer is projected to result in an increase in flow of the perched aquifer toward Little Antelope Creek of 1.8 gallons per minute (p. 3.5-37). This increase in movement in the perched aquifer may then result in an increase in flow at seep MA-1 or the development of a new seep along the margin of Little Antelope Creek.

In addition, the existing unnamed seep out of the Newmont-reclaimed South WRSF just downstream from seep MA-1 is stated to similarly contain elevated levels of sulfate and TDS. The Draft EIS indicates that Newmont's passive water treatment system and constructed wetland

Letter F2 Responses Continued

F2-12 (Cont) issue. In addition, the comment appears to misunderstand the facilities included in the Proposed Action. The enumerated "plans" dealing with "fluid stabilization" and "water management" are prepared for processing facilities such as tailing storage. No processing facilities are proposed as part of the Proposed Action and therefore, would not conduct any processing in the Project area.

All plans required by law are currently in place or would be obtained by the operator.

The monitoring measures suggested by the comment are standard procedures under RCG's Nevada Division of Environmental Protection (NDEP)-issued water pollution control permit. The model would continue to be updated with real time data, as this is also the current, standard practice. There is no "mine pool." Waste rock storage facility (WRSF) "seepage" if any, is collected under the lined WRSF and is treated in existing treatment facilities. No change to the text of the FEIS has been made to address this comment..

F2-13 Comment noted. The existing WRSF is managed according to NDEP water pollution control permit (WPCP) #NEV-2003107. Pursuant to the permit requirements, fluid volumes and Profile 1 water quality parameters are reported to NDEP quarterly. Analyzed data, including humidity cell and ABA testing, predicted acid-generation potential which agrees with the results for this leachate. Therefore, there is no discrepancy and no potential environmental consequences. No change to the text of the FEIS has been made to address this comment (see DEIS, Section 2.2.5, Waste Rock Management).

Letter F2 Continued

at this location has been insufficient at preventing continued contributions of contaminated water to Little Antelope Creek.

RCG proposes to continue to monitor water quality at the MA-1 seep and Little Antelope Creek to determine whether backfill of the West Pit does, in fact, result in changes to water quality and quantity at the MA-1 seep. This information would be utilized to refine the model and to determine whether or not the proposed Hollister Mine is affecting this seep. If the Hollister project is determined to be contributing to flows at seep MA-1, the Draft EIS proposes the construction of an artificial wetland to mitigate for this contamination.

F2-14

Recommendation: In light of the failure of the existing constructed wetland to prevent seep from Newmont's South WRSF from entering Little Antelope Creek, the basis for proposing construction of another artificial wetland as mitigation for impacts of the proposed project is unclear. EPA recommends that the Supplemental Draft EIS include a more thorough discussion of how flows from seep MA-1 would be controlled and prevented from further contaminating Little Antelope Creek, including an assessment of the likely effectiveness of proposed mitigation measures. Furthermore, the Draft EIS does not indicate whether the development of the West Pit WRSF has the potential to increase flow at the unnamed Newmont South WRSF seep as well. In light of the similarities in water quality data and the indicated movement direction of the perched aquifer toward both of these seeps, the Supplemental Draft EIS should consider this possibility and identify mitigation should reductions in water quality or increases in flow at this location occur.

The Clean Water Act prohibits the discharge of any pollutant through a point source into a water of the United States without a National Pollutant Discharge Elimination System (NPDES) permit. Little Antelope Creek has been identified as a jurisdictional water of the United States by the U.S. Army Corps of Engineers. Seep MA-1 and the unnamed seep exiting Newmont's South WRSF appear to be discharging into Little Antelope Creek without an NPDES permit, and the Draft EIS does not indicate that a NPDES permit will be obtained for these discharges.

F2-15

Recommendation: EPA recommends the Supplemental Draft EIS accurately characterize these seeps as unpermitted discharge and provide a description of ongoing and proposed mitigation efforts to either eliminate the seep or to obtain NPDES permit coverage.

Jurisdictional Delineation

According to the Draft EIS, (p. 3.6-2), "The U.S. Army Corps of Engineers (USACE) formally determined that Little Antelope Creek and tributary features in the project area are jurisdictional waters of the U.S. (USACE 2004). That determination was valid through April 2009…" Furthermore, "According to earlier field surveys in the project area, approximately 2.43 acres of waters of the U.S. occur along Little Antelope Creek, and approximately 1.01 acres of wetlands occur along this creek (JBR 2003a)." Jurisdictional determinations require re-verification after 5 years have elapsed; however, the USACE in Reno, Nevada indicate that they have not been contacted for re-verification for the Hollister Project.

Letter F2 Responses Continued

F2-14 Comment noted. The elevated chemical constituents from MA-1 seep are the result of historical mining operations from another operator. The DEIS identified that filling the West Pit with waste rock potentially could increase flow with elevated total dissolved solids (TDS) and sulfate in the perched aquifer towards Little Antelope Creek of up to 1.8 gallons per minute (gpm). There is no evidence that the MA-1 seep is contaminating Little Antelope Creek. The flows from the MA-1 seep are minimal to non-existent. Based on field data, the seep is actually dry approximately 80 percent of the time and when flow is present, it is so minor that it rarely, if ever, reaches Little Antelope Creek. Monitoring of flow and water quality in MA-1 seep and Little Antelope Creek, and potential mitigation measures should monitoring detect any impacts, are described in the Final Monitoring and Mitigation Plan as presented in Appendix C. A constructed wetland is one of several mitigation strategies that would be considered to address any water quality impacts. The existing constructed wetland was constructed and installed by another operator.

Lining and backfilling of the existing West Pit with waste rock potentially would increase total flow by up to 1.8 gpm. Exactly where this flow increase would be observed, if observed at all, is difficult to predict due to fracture control on groundwater flow. There is no evidence of any connection between the West Pit and the South WRSF seep. Geochemical evidence and hydraulic evidence indicate that the MA-1 seep is not connected hydraulically to groundwater underlying the West Pit (DEIS, Appendix B4). Given the location of the seep emanating from the South WRSF, it is even more unlikely that there is any connection between the West Pit and this seep. USEPA does not identify or characterize the "similarities" in water quality. Monitoring and mitigation is identified in Appendix C. No change to the text of the FEIS has been made to address this comment.

F2-15 Comment noted. These seeps are the result of historical mining operations by a previous operator. Further, such seeps are not an unpermitted discharge and it would be inaccurate to characterize them as such. Data from monitoring of seep MA-1 by RCG would be utilized to determine if the proposed Project is influencing seep MA-1. No change to the text of the FEIS has been made to address this comment.

Letter F2 Continued

In addition, while the Draft EIS identifies Little Antelope Creek, Antelope Creek, Rock Creek, etc, as jurisdictional, none of their intermittent/ephemeral tributaries appear to be included as part of the estimate of potentially impacted waters. It appears that the jurisdictional status of these intermittent or ephemeral tributaries has not been determined.

F2-16

Recommendations: The project proponent should contact the USACE office in Reno, Nevada to request a new jurisdictional determination to verify the amount of waters/wetlands within the entire (cumulative effects) project area.

The Supplemental Draft EIS should report on the status of consultation with the USACE. It should provide the area and linear feet of jurisdictional intermittent/ephemeral tributaries within the project area in addition to the jurisdictional status of perennial waters and wetlands. Furthermore, if there are no discharges of dredged or fill material from the project into WUS, this should be clearly stated in the EIS.

Financial Assurance for Post-Closure Obligations

Need for a Long-Term Funding Mechanism

Based on the information presented in the Draft EIS, EPA believes that the Hollister Underground Mine Project will require long term management and treatment to prevent substantial post-closure environmental contamination. For example, a system to pump and treat Vinini aquifer water may be needed to maintain an inflow condition into the backfilled underground workings until the groundwater no longer exhibits contamination exceeding water quality standards. This would both prevent the propagation of a contaminated groundwater plume from the underground workings and eliminate the possibility of overflow of contaminated groundwater into surface waters.

In addition, water infiltrating through the WRSFs during mine operation would be pumped and treated to meet water quality standards before discharge into the Rapid Infiltration Basins south of the mine. The Draft EIS does not indicate whether pumping and treatment of WRSF seepage would be necessary after mine closure; however EPA believes that this is highly likely based on the information available. For example, there is no indication that WRSF seepage quality is likely to change after closure of the mine and the Draft EIS does not provide evidence that the proposed waste rock/soil cover to be placed over the WRSFs during closure of the mine would effectively prevent all meteoric water infiltration.

The Draft EIS does not contain discussion of financial assurance needed to ensure that the costs of long-term post-closure monitoring and management will be covered by the mine operator for as long as necessary to prevent groundwater and surface water contamination. Specifically, the Draft EIS does not estimate the costs of long-term monitoring and management, analyze the adequacy and uncertainties associated with these estimated costs, or describe or analyze options for long-term funding mechanisms (LTFM) to demonstrate that funding will be available to completely cover the costs of these activities.

Letter F2 Responses Continued

F2-16 Comment noted. The only Project discharge into waters of the U.S. would be the outfall of clean water into Little Antelope Creek, as discussed in Section 3.6.2.1, Surface Water Resources and Watersheds, Proposed Action (DEIS). RCG would obtain a NPDES discharge permit for this proposed discharge. The EIS analyzed potential cumulative impacts to surface waters for all of the three watersheds identified as the cumulative effects study area (CESA). An updated wetland delineation was performed during the summer of 2012 (AMEC 2012). The waters of the U.S. report for the Project area has been submitted to the USACE. The Project would not result in discharges of dredged or fill material from the Project into waters of the U.S. A summary of the waters of the U.S. report is included in the FEIS (Section 3.9.1, Addendum).

Letter F2 Continued

Recommendation: The Supplemental Draft EIS should specify all of the necessary post-closure monitoring, operations and maintenance, and replacement activities at the Hollister Underground Mine; describe their performance standards and necessary timing; and include the cost estimates for these activities.

F2-17

In order to prevent post closure groundwater and surface water contamination from the mine, the BLM should require the mine operator to establish a LTFM to cover the costs of monitoring as well as source controls and/or water treatment facilities after closure of the mine for as long as they will be needed.

The BLM should determine the appropriate level of funding for the Hollister Underground Mine LTFM and disclose the specific mechanism that will be established; analyze the adequacy of the funding amount and mechanism; and provide this information in the Supplemental Draft EIS.

While the actual construction of a trust may vary, the overall goal is to ensure that the trust has sufficient assets to cover the costs for which it was established, for as long as needed.

Recommendations: We recommend BLM consider the following approaches to help ensure that the Hollister Underground Mine LTFM covers the costs of all necessary post-closure monitoring and operation and maintenance obligations for as long as they may be needed, which we believe may be at least several hundred years.

- **Consider the use of current value trusts or net present value (NPV) trusts with a standard benchmark discount rate** as opposed to an individually negotiated rate. Under the current value trust approach, the trust is fully funded immediately; whereas, under the NPV approach, cost estimates are calculated using a discount rate. Where NPV trusts are used, the single most important factor in calculating the beginning amount of the trust corpus (and therefore, the value of the trust in the future) is to use an appropriate discount rate. For example, EPA has authorized the 30-year Treasury Constant Maturity return for some trusts that allow for NPV. Overly aggressive discount rates "backload" contributions to the trust over time and limit true-up contributions.

F2-18

- **Shift to annual true-up cycle.** BLM requires adjustments, or "true-ups", to trust funds every three years if they are not meeting their growth performance goals. EPA supports the idea of a true-up requirement, but recommends that BLM consider using an annual true-up cycle rather than a 3-year cycle, to address both problematic investment performance and the risk of grantor bankruptcy or other corporate failure more often. Addressing either of these problems quickly (i.e., with a shorter true-up cycle) would ensure that the trust is better positioned to secure the appropriate funds based on performance goals.

- **Consider a more conservative investment portfolio requirement.** BLM imposes few limitations on the types of investments allowed for its trust funds. EPA generally imposes significant limitations on potential investments, especially when the trust is

Letter F2 Responses Continued

F2-17 Comment noted. It is not the BLM's policy to include estimated costs of reclamation or long-term maintenance in NEPA documents. Information on the RCE and/or the financial guarantee amount, while public information, is not included in the environmental analysis nor is public comment requested. The RCE and financial guarantee amount are not required components of a complete Plan of Operation but are part of the BLM's enforcement program. The public comment period should focus on the Plan of Operations and the associated environmental analysis (H-3809-1 Surface Management Handbook 9/17/2012; page 4-37 [BLM 2012a]). Reclamation and closure costs are time-sensitive, which is why the BLM Authorized Officer in accordance with the 43 CFR 3809 regulations has the authority to review and require cost updates at any time to ensure bond adequacy. In addition, as provided for in 43 CFR 3809.552(c), the BLM Authorized Officer has the authority to require additional bonding and/or a long-term trust. The BLM routinely reviews the reclamation cost estimate and bond during the life of the Project. If the need arises, the BLM Authorized Officer can determine that a long-term trust is needed and required, in which case a long-term trust would be established to address the specified need. Under the 43 CFR 3809 regulations, there is no limitation on the time-frame for the BLM to require monitoring, maintenance, or treatment of facilities at a mine site. The timeframe is indefinite or as long as it takes. No change to the text of the FEIS has been made to address this comment.

F2-18 See response to comment F2-17.

Letter F2 Continued

F2-18 Cont

an NPV trust. We acknowledge that there is a downside to conservative investment strategies (namely, that the grantor contribution would likely increase), but we believe, given the adverse consequences of a trust failure, potentially leading to liability for future taxpayers and/or unacceptable environmental impacts, a conservative approach may be appropriate.

Adaptive Management

EPA believes an adaptive management plan would be appropriate to address some of the water resource issues identified in the Draft EIS. For example, Vinini aquifer contamination may be greater than predicted, and neutralization of acid generating material may be less effective than predicted.

F2-19

Recommendations: Include, in the Supplemental Draft EIS, an adaptive management plan. The plan should consider potential failure modes and effects and ensure that contingency measures are identified and implementable in the event they become necessary. It should have a clear and detailed process linking monitoring with on-the-ground actions and agency enforcement.

Financial assurance for the project should include costs for undertaking tasks in the adaptive management plan should they become necessary. This cannot be accomplished by requiring financial assurance only after it becomes evident that a problem exists, because the operator may not be financially able to provide additional financial assurance at that time; rather, financial assurance should be required for those activities on a contingency basis.

Wastewater

The Draft EIS does not provide an adequate description of the existing and proposed sources of wastewater generated at the mine, nor of the wastewater treatment and ultimate disposal or re-use of wastewater. Additionally, the text appears to conflict with diagrams provided in the EIS. For example, the text on page 2-11 states "Any draindown water in the WRSF is collected and contained in wet well sumps and sent to water treatment facilities in the East Pit"; however the associated diagram (Figure 2-5 "Hollister Operation Water Management System) does not appear to include this source of water or treatment operation. The text on page 2-13 states that "water inflow" from the mine is sent to the East Pit water treatment facilities and is currently sent to the RIBs. However, Figure 2-5 indicates that "water inflow" from the proposed facility will not be treated prior to discharge to Little Antelope Creek. The Draft EIS does not specifically state that the "water inflow" from the proposed project will be treated. Figure 2-5 also does not include flow data or unit sizes for many of the operations, while several flow diagrams are apparently missing; for example, there is no indication of reverse osmosis brine disposal despite indication in the text that WRSF draindown would be treated via reverse osmosis.

F2-20

Recommendation: The Supplemental Draft EIS should provide a comprehensive description of each source of wastewater for the proposed project. Specifically, we

Letter F2 Responses Continued

F2-19 Comment noted. The 43 CFR 3809 regulations allow for amendments to the Plan of Operations to occur when necessary. The Final Monitoring and Mitigation Plan presented in Appendix C includes strategies to mitigate potential impacts based on the results of monitoring. An adaptive management plan is not warranted. According to the CEQ, the worst-case analysis was withdrawn from the NEPA by final rule issued at 51 Federal Register 15618 (April 25, 1986); textural errors corrected 51 Federal Register page 16846 (May 7, 1986). The preamble to this rule is published at ELR Administrative Material 35055, CEQ's Forty Most Asked Questions Concerning CEQ's NEPA Regulations, 46 Federal Register 18026 (March 23, 1981) as Amended.

It is not the BLM's policy to include estimated costs of reclamation or long-term maintenance in NEPA documents. Information on the RCE and/or the financial guarantee amount, while public information, is not included in the environmental analysis; nor is public comment requested. The RCE and financial guarantee amount are not required components of a complete Plan of Operation but are part of the BLM's enforcement program. The public comment period should focus on the Plan of Operations and the associated environmental analysis (H-3809-1 Surface Management Handbook 9/17/2012; page 4-37 [BLM 2012a]). Reclamation and closure costs are time-sensitive, which is why the BLM Authorized Officer in accordance with the 43 CFR 3809 regulations has the authority to review and require cost updates at any time to ensure bond adequacy. In addition, as provided for in 43 CFR 3809.552(c), the BLM Authorized Officer has the authority to require additional bonding and/or a long-term trust. The BLM routinely reviews the reclamation cost estimate and bond during the life of the Project. If the need arises, the BLM Authorized Officer can determine that a long-term trust is needed and required, in which case a long-term trust would be established to address the specified need. Under the 43 CFR 3809 regulations, there is no limitation on the time-frame for the BLM to require monitoring, maintenance, or treatment of facilities at a mine site; the timeframe is indefinite or as long as it takes. No change to the text of the FEIS has been made to address this comment.

F2-20 Comment noted. The Hollister EIS does not use the term "wastewater." Wastewater will not be generated nor discharged by the proposed Project. Water management for the existing operations (No Action Alternative) is described in sufficient detail for the purposes of this EIS in Section 2.2.6, Water Management, in the DEIS. Seepage from the existing WRSF is collected in the lined wet well sump, sampled, and treated as described in Section 2.2.5, Waste Rock Management (DEIS).

Letter F2 Continued

F2-20 (Cont)

recommend revising Figure 2-5 (Water Handling Diagram) to include two separate diagrams; one for the existing inputs and one for the proposed inputs. The diagrams should include each source of wastewater, including WRSF drainage, stormwater, "water inflow", and other sources of water at the mine site. The diagrams and text should clearly indicate projected flows, projected wastewater characteristics, intermediate treatment steps, design standards, and ultimate disposal or re-use. Additionally, the EIS should indicate the expected post-closure rates of surface runoff and seepage and how this water will continue to be treated.

According to 40 CFR 440.132, "mine drainage" is defined as any "water drained, pumped, or siphoned from a mine".

F2-21

Recommendation: Wastewater referred to in the Draft EIS as "water inflow" and "draindown water in the WRSF" should be characterized correctly as "mine drainage". The EIS should acknowledge that any discharge of mine drainage to surface waters must also comply with the effluent limitations and guidelines at 40 CFR Part 440 Ore Mining and Dressing.

Aquatic Biological Resources

Section 3.13 of the Draft EIS states that groundwater does not recharge Little Antelope or Antelope creeks (i.e., all creek water flows from precipitation and snowmelt). However, the discussion that follows (pgs. 3.13-7 and 8) conflicts with these conclusions by stating that the drawdown of groundwater will affect spring and wetland complexes along Antelope and Squaw creeks, which clearly will have potential adverse consequences on stream flows in these waterbodies (p. 3.13-7). Furthermore, Section 3.6 indicates that lower Little Antelope Creek gains groundwater baseflow contributions during the summer months.

F2-22

Recommendation: In light of the groundwater contamination discussed above, the matter of whether or not Little Antelope Creek receives groundwater contributions is particularly significant. The Supplemental Draft EIS should more clearly articulate the extent to which Little Antelope Creek receives significant baseflow from groundwater sources and which groundwater aquifers are believed to contribute to this flow.

Section 3.13.1.1 of the Draft EIS states that Little Antelope Creek is intermittent, however the subsequent discussion and Fig. 3.6-2 indicate that substantial portions are perennial.

F2-23

Recommendation: This discrepancy should be corrected, and presuming that Fig. 3.6-2 is correct, Section 3.13.1.1 should reflect that substantial portions of Little Antelope Creek are perennial.

The fish surveys discussed in Section 3.13.1.2 are outdated and only cover a small portion of the streams and stream reaches in the project area that could potentially support native fish.

Letter F2 Responses Continued

F2-20 (Cont) Water Management for the Proposed Action is described in Section 2.4.3.4, Water Management, in the DEIS. Seepage from the proposed West Pit WRSF would be collected, sampled, and treated as described in Section 4.4.4.2, West Pit WRSF (DEIS). DEIS Figure 2-5 is easily understood and to break this into two figures would lead to confusion. No change to the text of the FEIS has been made to address this comment.

F2-21 Comment noted. The regulation cited (40 CFR 440.132) in the comment pertains to USEPA's regulations for Subpart L-General Provisions and Definitions and Part 440 – Ore Mining and Dressing Point Source Category. Nevada is delegated by USEPA to administer the Clean Water Act permitting, monitoring, and enforcement. Discharge of water must comply with applicable federal and state standards. No water would be discharged into Little Antelope Creek until such time as the National Pollutant Discharge Elimination System (NPDES) permit is in place. Discharge requirements would be stipulated in the permit. In accordance with federal and state regulations, the NPDES permit would only allow the discharge of clean water into surface waters. There are no current or proposed processing facilities at the Hollister Site. Any discharge into surface waters under the NPDES permit including discharge into Little Antelope Creek, will be clean water and will meet applicable effluent standards.

No change to the text of the FEIS has been made to address this comment.

F2-22 Comment noted. The DEIS Section 3.6, Surface Water Resources and Watersheds, and Section 3.13, Aquatic Resources, describe the Little Antelope Creek, Antelope Creek, and Squaw Creek. Page 3.6-8 of the DEIS states "Based on these data, it seems likely that parts of lower Little Antelope Creek gain groundwater baseflow contributions through the summer months during years of average or greater precipitation." However, as illustrated on Figure 3.6-4 (DEIS), the Vinini Formation is not present on the ground surface along Little Antelope Creek. Therefore, the groundwater baseflow would be from the volcanic rock aquifer.

F2-23 Comment noted. Substantial portions of Little Antelope Creek are intermittent; however, there are perennial reaches in the creek. The text of the FEIS was modified in Section 3.13.1.1 to note that there are perennial reaches in Little Antelope Creek.

The perennial stretch on Little Antelope Creek in this discussion of the DEIS pertains to the segment of Little Antelope Creek that lies within an exclosure, excluding this reach from grazing. The exclosure and this perennial reach of the stream are approximately 0.5 mile long.

Letter F2 Continued

F2-24 **Recommendation:** The Supplemental Draft EIS should include more recent, thorough fish surveys over several seasons to document the use of project area streams by native fishes.

The "limited visual" surveys of amphibians within the project area, discussed in Section 31.13.1.2, are not adequate to document the status of several amphibian species, such as Great Basin spadefoot toad, western toad, spotted frog, leopard frog, and Pacific tree frog, that are known to use, or could potentially use, aquatic habitats within the area.

F2-25 **Recommendation:** More thorough amphibian species surveys should be completed in order to adequately survey all species that could potentially use the aquatic habitats in the project area.

Section 3.13.2.1 of the Draft EIS assumes that sedimentation to Little Antelope Creek from surface disturbance activities will be minor; however, there is little supporting documentation for this conclusion. In addition, it is assumed that fish will not occur in areas affected by sedimentation in intermittent reaches of Little Antelope Creek, despite the fact that the Draft EIS states that flows will become more persistent in Little Antelope Creek due to the proposed NPDES permitted discharge of well water. It is very plausible that fish will colonize newly wetted, perennial reaches of Little Antelope Creek.

F2-26 **Recommendation:** The Supplemental Draft EIS should include a discussion of the potential impacts to fish species that may occur due to sedimentation in Little Antelope Creek, including those reaches expected to transition from intermittent to perennial due to the proposed NPDES permitted discharge.

Because impacts from surface disturbance are not adequately discussed or quantified in Section 3.13.2, there is little support for the conclusion presented in Section 3.13.3 (Cumulative Impacts) that the risk posed to aquatic areas from such disturbances is low. Clearly, impacts associated with groundwater pumping and resultant flow reductions in springs, seeps and streams would result in significant impacts to aquatic resources in the Antelope Creek sub-basin, and perhaps adjacent sub-basins. Beneficial environmental effects from increased flows in Little Antelope Creek during the period of discharge of dewatering water are unclear based upon the information presented. While flow augmentation may increase the growth of some riparian/wetland vegetation, there are potential adverse impacts of increasing the length of wetted channel (i.e., promoting the spread of the nonnative red shiner in the watershed, transport of mine drainage to downstream waters).

F2-27 **Recommendation**: The Supplemental Draft EIS should discuss and disclose the results and conclusions of a proper risk assessment in regards to the project's potential to cumulatively impact aquatic resources in the study area. Any claims of beneficial effects from temporary increases in flow should be more thoroughly justified and adverse consequences considered.

Letter F2 Responses Continued

F2-24 Comment noted. An assessment completed by BLM in July of 2011 showed native fish species including Lahontan speckled dace, suckers, and redside shiners were widespread and abundant in the mainstem of Antelope Creek (BLM 2011). Prior surveys also have documented native fish distribution in the Antelope Creek drainage (see DEIS, Section 3.13.1.2, Aquatic Communities). All three of these species are considered widespread in western U.S. and occur in a variety of habitat types (Sigler and Sigler 1987). Because of their distribution and abundance, they are not considered at risk for extirpation. In addition, detailed hydrologic studies show no adverse impacts to Little Antelope Creek from water discharge (Brown and Caldwell 2011b). No change to the text of the FEIS has been made to address this comment.

F2-25 Comment noted. Amphibian surveys were completed in Little Antelope and Antelope creeks in August 2010 (AECOM 2010). When considering the predicted impacts for surface water and associated aquatic species, detailed surveys over several seasons would not provide additional information useful to the analyses. No change to the text of the FEIS has been made to address this comment.

F2-26 Comment noted. The potential impacts of sedimentation on aquatic habitats and species are considered minor (see Section 3.13.2.1, Proposed Action). Detailed hydrologic studies addressing discharge effects to the Little Antelope Creek channel show only minor increases in flow velocity and shear stress in this naturally armored channel (Brown and Caldwell 2011b). Based on a stream analysis and a channel stability assessment, Brown and Caldwell (2011b) conclude the discharge is not expected to adversely impact either hydraulic capacity of the channel or the natural sediment migration currently existing within the stream. Erosion control measures outlined in the Stormwater Pollution Prevention Plan (SWPPP) and Reclamation Plan and engineered storm water diversions also would minimize potential for sediment to reach the Little Antelope Creek channel. See Monitoring and Mitigation Plan (Appendix C). No change to the text of the FEIS has been made to address this comment.

F2-27 Comment noted. Cumulative effects are discussed in Section 3.13.3. Considering the types of impacts associated with the proposed Project on aquatic biological resources, a risk assessment is not necessary to evaluate cumulative impacts. By using the discharge outfall, flow would increase in Little Antelope Creek and result in increased aquatic habitat. This would convert an intermittent reach of the stream to perennial flow during the discharge period. The conclusion that the increased flows are not expected to adversely affect Little Antelope Creek and that

Letter F2 Continued

Groundwater Drawdown/Quantity Impacts

The Draft EIS does not include a description of the potential effects of specific model uncertainties on the model predictions in regards to the potential effects of groundwater drawdown.

F2-28

Recommendation: In view of the importance of the flow model predictions to subsequent impact analyses, the Supplemental or Revised Draft EIS should include a more complete and specific description of uncertainties associated with factors such as structure, boundary conditions, and calibration of the model and their potential effects on the model predictions, including uncertainties arising in connection with:

- availability of calibration data;
- overparameterization (the total number of parameters comprising the model, whether assigned or calibrated);
- the incorporation of geologic features such as flow barriers;
- the specification of constant head conditions on the lateral model boundaries;
- the plausibility of model-calibrated transmissivity;
- whether or not the model results in the reproduction of spring discharges; and
- validity of assumed rates of depth decay of hydraulic conductivity within regional modeling units (RMUs).

The Supplemental Draft EIS should reflect that model predictions of drawdown and changes in spring/stream discharge at specific locations are highly uncertain due to the limitations of the flow model, and, consequently, the analysis of impacts to spring and stream quantity, quality and biology is highly uncertain.

Drawdown predictions produced using the model approximate the minimum areal extent and magnitude of drawdown that will result from project pumping because they are based on 10-ft contours. However small changes in groundwater levels can have dramatic effects on springs, streams and wetlands. A two or five foot contour interval would be a more appropriate measure of the maximum extent and magnitude of drawdown and would allow for more accurate assessment of impacts. The model represents a minimum diffusivity interpretation of the flow system which yields estimates of the minimum extent of drawdown rather than a best estimate.

F2-29

Recommendation: Both a best estimate and maximum extent drawdown should also be provided in the Supplemental Draft EIS.

There are many more aquatic areas included within the 10-foot groundwater drawdown contour area than are analyzed within the Draft EIS, which focuses primarily on the Antelope Creek sub-watershed. It is unclear why the analysis in the Draft EIS does not consider potential effects of groundwater drawdown on other aquatic features such as Willow Creek, Hot Creek, etc.

F2-30

Recommendation: The Supplemental Draft EIS should discuss the project's impacts upon all areas that fall within the significance threshold for groundwater quantity impacts.

Table 3.9.2 - Wetland Areas Potentially affected by Groundwater Drawdown, references studies in support of its conclusions, but without any summary of this information in the Draft EIS, and

Letter F2 Responses Continued

F2-27 (Cont) discharge water would be locally available to existing plant and animal communities is based on hydrologic modeling and a detailed channel stability assessment (Brown and Caldwell 2011b).

F2-28 Comment noted. Appendices B2, Groundwater Model Report, and B3, Geochemical Model Report (DEIS), provide sufficient detail on the input data, assumptions, calibrations, and results to assess potential impacts from the proposed Project. The availability of calibration data is discussed in Appendix B2, Section 4.2, Model Calibration, which describes the addition of a 1,763-day transient calibration period to ensure that the model was adequately simulating groundwater drawdown. Uncertainty with respect to boundary conditions is addressed in Appendix B2, Section 3.3.4, Model Domain and Boundary Conditions, which describes assessment of the boundary conditions. The thickness of the Vinini aquifer is known in an approximate sense, and the hydraulic conductivity values used are from local aquifer testing. The calibrated hydraulic conductivity values ranged from a factor of 1.5 to 2.0 times the hydraulic conductivity estimated from the local aquifer testing. Therefore, the calibrated hydraulic conductivity value is very reasonable with respect to the estimated value, and the resulting calculated transmissivity is completely plausible. Reduced hydraulic conductivity with depth ("depth decay") is frequently observed and incorporated into groundwater models. In the case of the Hollister groundwater model, the depth decay was slight (from 2.0 to 1.5 feet/day), and the validity of this decay was substantiated through model calibration (see Appendix B2, Section 4.2, Model Calibration).

While uncertainties exist in all groundwater models, the Hollister model is calibrated to actual drawdown observed in the underground mine workings over a 1,763-day period of groundwater removal.

It should be noted that Appendix B2, Groundwater Model Report, states in Section 4.3.2, Simulated Water Budget, that "Note that no recharge or leakage from overlying units was included in either simulation, a conservative assumption taken to not allow an underestimation of future mine-related drawdown during the predictive simulation." Therefore, the analysis of impacts to spring and stream quantity, quality, and biology is not highly uncertain. No change to the text of the FEIS has been made to address this comment.

Groundwater monitoring data as identified in the Final Monitoring and Mitigation Plan (Appendix C) would be used to update the models and refine impact predictions.

F2-29 Comment noted. The 10-foot drawdown contour is standard in Nevada because this is the range of seasonal variation in groundwater levels in

Letter F2 Responses Continued

F2-29 (Cont) wells. Groundwater modeling is less precise at predicting groundwater changes at levels less than ten feet, particularly in areas distant from the pumping sources. Using the hydrologic model to predict drawdown to a level less than 10 feet does not represent the best science and is not needed in order to take a hard look at the potential environmental consequences.

Also, use of the numeric flow model to Project potential drawdown at magnitudes of less than approximately 10 percent of the local magnitude of the drawdown becomes progressively uncertain as the threshold for drawdown prediction decreases. While the numeric model produces values of drawdown to small fractions of a foot, extrapolated over vast distances of the model domain, the numbers at this level of precision become an artifact of numeric processes rather than a representation of a physical reality. This is due to physical and mathematical simplifications necessary to model the groundwater regional flow system. While there is no standardized way to determine a reporting threshold, the value of 10 feet is believed to be commensurate with the predictive qualities and uncertainties associated with the model. It is acknowledged that lesser degrees of drawdown can have impacts. However, modeling in complex geologic settings have limitations, and to report modeling results to very small thresholds would project false levels of model utility. No change to the text of the FEIS has been made to address this comment.

F2-30 Comment noted. Section 3.5.2.3, Groundwater and Geochemistry, Proposed Action of the DEIS describes the screening methodology used to evaluate potential impacts to surface water features from groundwater drawdown. Only surface water features sourced in the Vinini or Strathearn formations with a spring elevation less than 50 feet above the groundwater elevation potentially would be affected by groundwater drawdown in the Vinini Formation. The EIS analyzed all wetlands and surface waterbodies where the depth to groundwater was 50 feet or less and sourced in the Vinini or Strathearn formations. Any aquatic areas which did not meet this criteria were not analyzed because they would not be affected by groundwater drawdown. No change to the text of the FEIS has been made to address this comment.

Letter F2 Continued

therefore EPA is unable to judge the validity of the conclusions. Based upon the information available, it seems that the primary justification for determining that certain springs and wetlands have a low potential to be affected by groundwater drawdown is that they do not lie on the Vinini Formation. The Draft EIS does not provide sufficient justification for this assumption. Given the Draft EIS' projection that groundwater drawdown would reduce stream flows along 10.4 miles of Antelope Creek (see Page 3.13-7), and that reduced flows from springs contributing to Antelope, Alkali and Squaw creeks may result in the long-term loss of some riparian vegetation (pg. 3.9-8), it seems likely that riparian/wetland habitats adjacent to the creek would be adversely affected. Furthermore, the Draft EIS does not assess the wetland/stream functions lost or degraded by groundwater pumping and drawdown.

F2-31

Recommendation: These potential impacts to riparian/wetland areas should be assessed more thoroughly in the Supplemental Draft EIS. The document should include both a quantitative and qualitative analysis of the full extent of riparian/wetland habitats likely to be impacted by the proposed project and a functional assessment of the wetland/stream values likely to be degraded or lost due to groundwater pumping and drawdown.

Mitigation for Impacts from Dewatering

The mitigation measures presented in Sections 3.9.4 and 3.13.4 are not adequate to offset the potential impacts identified in these sections. There is no mention of reduced groundwater pumping as a way to mitigate for water drawdown and its impacts on wetlands and other aquatic areas. There are no monitoring or mitigation measures proposed for the reduced flows/drying along 10.4 miles of Antelope Creek and its effects on aquatic organisms such as fish. Impacts resulting from groundwater pumping associated with the proposed project will likely cause or contribute to significant degradation of the aquatic ecosystem in the project area.

F2-32

Recommendation: The Supplemental Draft EIS should indicate that the project is likely to result in significant degradation of aquatic ecosystems in the study area. Additional mitigation measures should be considered, including reduction or cessation of groundwater pumping if a particular mitigation threshold is passed.

Stormwater

Section 3.6.2.1 of the Draft EIS states that the proposed action "has the potential to increase sediment and turbidity due to construction and ground disturbing activities". The Draft EIS defers to the Storm Water Pollution Prevention Plan (SWPPP) and Reclamation Plan to address these impacts, stating "To further reduce erosion potential, storm water diversions would be installed upgradient and around project facilities, as needed, to divert storm water runoff around disturbance areas. Facilities would be graded appropriately and monitored following spring snowmelt and intense rain events to ensure that drainage and sediment control measures are effective and operating properly" (Section 2.4.9.2 page 2-59). The Draft EIS provides little information on the types and extent of proposed Best Management Practices (BMPs) and other provisions that would be likely to be included in a NPDES permit for this project issued by the State of Nevada.

Letter F2 Responses Continued

F2-31 Comment noted. Acres of riparian/wetland areas that would likely be affected by groundwater drawdown were provided in the DEIS in Section 3.9, Riparian and Wetland Areas. A functional assessment of the riparian/wetland areas that may be affected by groundwater drawdown is not warranted.

The DEIS Section 3.5.2.3, Groundwater and Geochemistry, Proposed Action, describes the screening methodology used to evaluate potential impacts to surface water features from groundwater drawdown. Only surface water features sourced in the Vinini or Strathearn formations with a spring elevation less than 50 feet above the groundwater elevation potentially would be affected by groundwater drawdown in the Vinini Formation. The EIS analyzed all wetlands and surface waterbodies where the depth to groundwater was 50 feet or less and sourced in the Vinini or Strathearn formations. Additional information on condition of major riparian and wetland habitats potentially impacted by cumulative effects of groundwater drawdown has been added to the FEIS (see Section 3.9.3, Cumulative Impacts).

F2-32 Comment noted. Impacts of groundwater pumping on aquatic habitat and species are discussed in Section 3.13.2.1, Aquatic Resource Proposed Action, under Water Management Activities. See Monitoring and Mitigation Plan, Appendix C. The Brown and Caldwell (2011b) study concluded that water discharge into Little Antelope Creek is not expected to have an adverse impact on hydraulic capacity or natural sediment movement. No change to the text of the FEIS has been made to address this comment.

Letter F2 Continued

F2-33

Recommendation: Due to the high sensitivity of certain receiving waters identified in the Draft EIS as "Class A" and perennial waters, EPA recommends that the Supplemental Draft EIS provide a comprehensive description of the BMPs and stormwater controls to be utilized, including maps, BMP locations, outfall locations, temporary and permanent stabilization measures, maintenance requirements, and other components of the SWPPP necessary to mitigate the potentially adverse effects on receiving waters.

EPA recommends that the Supplemental Draft EIS include stormwater outfall monitoring for sediment and turbidity to ensure the BMP implementation is protective of receiving water quality. EPA recommends weekly monitoring for Total Suspended Solids and Turbidity for all stormwater outfalls discharging to perennial waters to ensure proper design and implementation of BMPs.

Air Quality

The Draft EIS states, "The only Hazardous Air Pollutant (HAP) that would be emitted due to this project is mercury. Mined ore containing mercury would be processed at either the Esmeralda Mill or the Midas Mill." (3.19-15) Diesel fuel emissions contain a number of HAPs. It seems unlikely, therefore, that this statement accurately reflects all potential sources of HAPs that are likely to be emitted as a result of the proposed project.

F2-34

Recommendation: The Supplemental Draft EIS should account for all potential sources of HAPs in determining the total emissions associated with the proposed project (i.e. emissions associated with the combustion of diesel fuel, etc.).

The proposed project includes the shipment of ore for milling off site at either the Midas Mill or the Esmeralda Mill. Considering the approximately 300 additional miles from the Hollister Underground Mine site and the Esmeralda Mill site, as compared to the distance to the Midas Mill site, milling of Hollister Underground ore at the Esmeralda Mill would result in a substantially larger carbon footprint for the proposed project as well as increased mobile source emissions, particularly from heavy-duty diesel trucks.

F2-35

Recommendation: EPA encourages the project proponent and the BLM to reconsider the decision to utilize the Esmeralda Mill site as a milling location for Hollister Underground Mine ore.

Letter F2 Responses Continued

F2-33 Comment noted. RCG has a current SWPPP as required under State of Nevada regulations and administered by NDEP. The DEIS (Section 3.6.2.1, Surface Water, Proposed Action) describes all of the BMPs and storm water controls required under the storm water permit. No change to the text of the FEIS has been made to address this comment.

F2-34 The combustion of fossil fuels results in emissions of a number of criteria pollutants, hazardous air pollutants (HAPs) and greenhouse gases (GHGs). A summary of criteria pollutant emissions from the diesel-fired stationary combustion sources located at the Hollister Site are listed in Table 3.19-4. In the DEIS, it states that diesel emissions from stationary sources would decrease due to the delegation of the generators to emergency backup only as electric power from transmission lines becomes the primary power source for the Project. Since publication of the DEIS, the generators have been replaced with newer more efficient generators that operate on cleaner-burning LNG. As such, the original Table 3.19-4 overstates current emissions at the Hollister Site. All emissions categories should decrease as a result of the change in equipment and fuel. A revised Table 3.19-4 has been provided in the FEIS to reflect the new and more efficient equipment and fuel used on site.

Section 3.2.1 of Appendix G, Air Quality Technical Support Document for the Hollister Underground Mine Project DEIS, indicates that the two existing Cummins diesel generators located at the East Pit would be reduced to 500 hours of emergency backup operation due to electric power being supplied by the transmission line as part of the proposed action. Largely as a result of using the diesel generators for emergency backup power only, the DEIS concluded that "the total emissions for the stationary source emissions due to the Proposed Action would be less than the existing Hollister operations under the No Action Alternative." See Appendix G, Section 3.2.1. This conclusion would still hold true and is still appropriate whether diesel or LNG fueled generators are in use. However, as indicated in the FEIS, the two diesel generators at the East Pit have been switched out for generators fueled by LNG. Overall, natural gas-driven generators cause significantly less air emissions than diesel-driven generators. Indeed, criteria pollutant emissions are significantly decreased as a result of the new LNG engines from 24.8 tons per year for the diesel units to 5.548 tons per year for the LNG units. While hazardous air pollutants would increase slightly with the natural gas engines, due solely to emissions of formaldehyde, the yearly total HAP emissions (8.56E-02) are insignificant. Thus, the total emissions for the stationary source emissions due to the Proposed

Letter F2 Responses Continued

F2-34 (Cont) Action are even less than was estimated in the DEIS, and are still less than those under the No Action Alternative.

F2-35 Comment noted. However, the milling location would depend on capacities of the mill to handle additional ore under current permits, contractual agreements, costs, and other factors. RCG chose not to propose on-site processing facilities, which would have reduced mobile source emissions in comparison to the Proposed Action, due to concerns raised by certain Western Shoshone Tribes. No change to the text of the FEIS has been made to address this comment.

Letter S1

Mine,
http://clearinghouse.nv.gov/public/Notice/2012/E2012-243.pdf

Skip Canfield
Nevada State Clearinghouse
State Land Use Planning Agency

Nevada Division of State Lands
Department of Conservation and Natural Resources
901 South Stewart Street, Suite 5003
Carson City, NV 89701
775-684-2723
http://clearinghouse.nv.gov
www.lands.nv.gov

The Nevada Division of State Lands and the State Land Use Planning Agency offer the following comments:

S1-1 Multiple use activities on Nevada's public lands are supported and encouraged. Please consider the cumulative visual impacts to public lands users' experiences from certain activities (temporary and permanent). Some notable activities include proliferation of new roads, poorly-sited and designed structures, lack of co-location of infrastructure and improper lighting, to name a few.

The following language is suggested that should be provided up front to applicants who propose development on public lands:

Utilize appropriate lighting:

S1-2
- Utilize consistent lighting mitigation measures that follow "Dark Sky" lighting practices.
- Effective lighting should have screens that do not allow the bulb to shine up or out. All proposed lighting shall be located to avoid light pollution onto any adjacent lands as viewed from a distance. All lighting fixtures shall be hooded and shielded, face downward, located within soffits and directed on to the pertinent site only, and away from adjacent parcels or areas.
- A lighting plan should be submitted indicating the types of lighting and fixtures, the locations of fixtures, lumens of lighting, and the areas illuminated by the lighting plan.
- Any required FAA lighting should be consolidated and minimized wherever possible.

In addition, the following mitigation measures should be employed.

Utilize building materials, colors and site placement that are compatible with the natural environment:

S1-3
- Utilize consistent mitigation measures that address logical placement of improvements and use of appropriate screening and structure colors. Existing utility corridors, roads and areas of disturbed land should be utilized wherever possible. Proliferation of new roads should be avoided.
- For example, the use of compatible paint colors on structures reduces the visual impacts of the built environment. Using screening, careful site placement, and cognitive use of earth-tone colors/materials that match the environment improve the user experience for others who might have different values than what is fostered by built environment activities.

S1-4
- Federal agencies should require these mitigation measures as conditions of approval for all permanent and temporary applications.

Skip Canfield
State Land Use Planning Agency

Letter S1 Responses

S1-1 Comment noted. Chapter 3.0, specifically Section 3.22, Visual Resources, of the DEIS discloses the potential cumulative impacts associated with the proposed Project. No change to the text of the FEIS has been made to address this comment.

S1-2 Comment noted. In order to provide adequate lighting to protect workers safety, some light may be visible from adjacent lands and into the night sky. However, RCG will use dark sky methods such as reflectors to ensure light is directed downward to lessen the impacts to adjacent lands and the night sky. Section 3.22.3, Visual Resources, pages 3.22-6 to 3.22-8, provides a discussion of the potential impacts to visual resources. No change to the text of the FEIS has been made to address this comment.

S1-3 Comment noted. When developing the proposed Project, RCG considered the placement of the facilities to lessen the visual impacts of the proposed facilities on the landscape. RCG proposes to paint the buildings and applicable structures with colors that match the natural surroundings (DEIS Section 2.4.9.7, Applicant-committed Environmental Protection Measures, Visual Resources). Section 3.22, Visual Resources, provides a discussion of the potential impacts to visual resources resulting from the Proposed Action. No change to the text of the FEIS has been made to address this comment.

S1-4 Comment noted.

Letter S2

Skip Canfield

From: Alex Lanza
Sent: Monday, June 18, 2012 3:01 PM
To: Skip Canfield
Subject: RE: Nevada State Clearinghouse Notice E2012-243 - DEIS Hollister Underground Mine

Good morning Skip;

The Nevada Division of Environmental Protection (NDEP) - Bureau of Water Pollution Control (BWPC) - does not have any comments regarding **Notice E2012-243 - DEIS Hollister Underground Mine, Nevada.**

S2-1 Please note that the entity who manages this **DEIS Hollister Underground Mine project** may be subject to BWPC permitting associated with any of its discharges – including, but not limited to well development, wastewater, Diminimis, UIC, and domestic sewage discharges.

Thank you for the information and the opportunity to comment.

If you have any questions, please contact me at (775) 687-9468.

Respectfully,

Alexi Lanza

Alexi Lanza, P.E.
Permits Branch - Bureau of Water Pollution Control
Nevada Division of Environmental Protection
901 S. Stewart St., Ste 4001
Carson City NV 89701
Phone: 775.687.9468 - Fax: 775.687.4684
www.ndep.nv.gov

Please visit BWPC's main website: http://ndep.nv.gov/bwpc/index.htm

Letter S2 Response

S2-1 Comment noted. The operator is responsible for obtaining all applicable federal, state, and county permits.

Letter S3

Nevada State Clearinghouse Notice E2012-243
Project: DEIS Hollister Underground Mine

S3-1 1. There are other water rights holders that may be affected by project activities. Rodeo Creek Gold must not impair surrounding water rights holders or they may be required to submit a Monitoring Mitigation and Management (3M) Plan showing how the water rights can be fulfilled if they do become impacted.

S3-2 2. Please be advised that any water used on the described project be provided by an established utility or under permit or waiver issued by the State Engineer's Office. All waters of the State belong to the public and may be appropriated for beneficial use under the provisions of Nevada Revised Statutes (NRS) Chapters 533 and 534 and not otherwise.

Monica Grammenos June 15, 2012
Water Resource Specialist I
Nevada Division of Water Resources

Letter S3 Responses

S3-1 Comment noted. The DEIS addresses Water Rights in Section 3.6, Surface Water Resources and Watersheds. The section states that water rights are regulated by Nevada Division of Water Resources (NDWR) and the BLM does not have the authority to regulate water rights in Nevada. See DEIS pages 3.6-9 to 3.6-10 and Figure 3.6-3. No change to the text of the FEIS has been made to address this comment.

S3-2 Comment noted. See response to comment S3-1.

Letter S4

Skip Canfield

From: Rebecca Palmer
Sent: Wednesday, June 20, 2012 9:58 AM
To: Skip Canfield
Subject: RE: Nevada State Clearinghouse Notice E2012-243

The SHPO has reviewed the subject document. Although the draft Programmatic Agreement (PA) is mentioned frequently throughout the document, the SHPO cannot find any statement that either informs the public that they can comment on the PA or provides a copy of the draft document for review. Is this request for public review contained in some other announcement or public document? If not, the SHPO strongly recommends that the public be provided with
S4-1 an explicitly-stated opportunity to comment on the document through some NEPA document in accord with the draft PA. The SHPO notes that the reference to the statewide Protocol Agreement is out of date, please correct the date to
S4-2 read amended in 2012.

Rebecca Lynn Palmer
Deputy Historic Preservation Officer
901 South Stewart Street, Suite 5004
Carson City NV 89701
Phone (775) 684-3443
Fax (775) 684-3442

Please note, my email is rlpalmer@shpo.nv.gov

From: scanfield@lands.nv.gov [mailto:scanfield@lands.nv.gov]
Sent: Friday, June 01, 2012 2:55 PM
To: Alan Coyner; Alan Jenne; Alisanne Maffei; clytle@lincolnnv.com; cstevenson@ndow.org; Brad Hardenbrook; ddavis@unr.edu; dmouat@dri.edu; ed.rybold@navy.mil; James Morefield; jhardcas@unr.edu; Jennifer Newmark; Jennifer Scanland; munteanj@unr.edu; John Walker; jprice@unr.edu; Karen Beckley; kirk.bausman@us.army.mil; cohnl@nv.doe.gov; Lowell Price; Mark Freese; Mark Harris; Mike Dondero; deborah.macneill@nellis.af.mil; escomm2@citlink.net; Octavious.Hill@nellis.af.mil; Pete Anderson; Rebecca Palmer; Rich Harvey; Robert K. Martinez; Sandy Quilici; Steven Siegel; tcompton@dot.state.nv.us; Terry Rubald; Richard Ewell; tmueller@dot.state.nv.us; Tod.oppenborn@nellis.af.mil; William.Cadwallader@nellis.af.mil; zip.upham@navy.mil; Tim Rubald; Alex Lanza; Dave Marlow; Michael Visher; Kevin J. Hill; dziegler@lcb.state.nv.us; Richard A. Wiggins; Robert Gregg; Shimi.Mathew@nellis.af.mil; Skip Canfield; whenderson@nvnaco.org; mstewart@lcb.state.nv.us; Pete Konesky; Russ Land; Sherry Rupert; sscholley@lcb.state.nv.us
Subject: Nevada State Clearinghouse Notice E2012-243

NEVADA STATE CLEARINGHOUSE
Department of Conservation and Natural Resources, Division of State Lands
901 S. Stewart St., Ste. 5003, Carson City, Nevada 89701-5246
(775) 684-2723 Fax (775) 684-2721

TRANSMISSION DATE: 06/01/2012

U.S. Bureau of Land Management

Nevada State Clearinghouse Notice E2012-243

Letter S4 Responses

S4-1 Comment noted. 36 CFR 800.4(b)(ii) governs PAs and states, in part, "[t]he agency shall arrange for public participation... and take steps to involve the individuals, organizations and entities likely to be interested." The PA is designed to evaluate National Register of Historic Places (NRHP) eligible sites and/or sites of Tribal concern that could be adversely impacted by the proposed Project and implement mitigation procedures to minimize any adverse impacts. The BLM provided four versions of the draft PA between the BLM, SHPO, ACHP, and RCG for the Project to the Tribes for review, and conducted meetings with the interested Tribes. A copy of this PA is included in Appendix A of the FEIS.

S4-2 Comment noted. The FEIS has been corrected to state that the statewide Protocol Agreement was amended in 2012.

Letter S4 Continued

Project: DEIS Hollister Underground Mine

Follow the link below to find information concerning the above-mentioned project for your review and comment.
E2012-243 - http://clearinghouse.nv.gov/public/Notice/2012/E2012-243.pdf

- **Please evaluate this project's effects on your agency's plans and programs and any other issues that you are aware of that might be pertinent to applicable laws and regulations.**

- **Please reply directly from this e-mail and attach your comments.**

- **Please submit your comments no later than Monday July 2nd, 2012.**

PLEASE NOTE: This is a large file, if you have trouble with the Clearinghouse link, go to http://www.blm.gov/nv/st/en/fo/elko_field_office.html

Clearinghouse project archive

Questions? Skip Canfield, Program Manager, (775) 684-2723 or nevadaclearinghouse@lands.nv.gov

____No comment on this project ____Proposal supported as written
AGENCY COMMENTS:

Signature:

Date:

Requested By:

Distribution:
Alan Coyner - Commission on Minerals
Alan Jenne - Department of Wildlife, Elko
Alex Lanza -
Alisanne Maffei - Department of Administration

Letter S4 Continued

Cory Lytle - Lincoln County
Craig Stevenson - Department of Wildlife, Las Vegas
D. Bradford Hardenbrook - Department of Wildlife, Las Vegas
Dave Marlow -
Dave Ziegler - LCB
David David - UNR Bureau of Mines
David Mouat - Desert Research Institute
Ed Rybold - NAS Fallon
James D. Morefield - Natural Heritage Program
Jeff Hardcastle - State Demographer
Jennifer Newmark -
Jennifer Scanland - Division of State Parks
John Muntean - UNR Bureau of Mines
John Walker - Nevada Division of Environmental Protection
Jon Price - UNR Bureau of Mines
Karen Beckley - State Health Division
Kevin Hill - Nevada State Energy Office
Kirk Bausman - Hawthorne Army Depot
Linda Cohn - National Nuclear Security Administration
Lowell Price - Commission on Minerals
Mark Freese - Department of Wildlife
Mark Harris, PE - Public Utilities Commission
Michael J. Stewart - Legislative Counsel Bureau
Michael Visher - Division of Minerals
Mike Dondero - Division of Forestry
Ms. Deborah MacNeill - Nellis Air Force Base
Nancy Boland - Esmeralda County
Octavious Q. Hill - Nellis Air Force Base
Pete Anderson - Division of Forestry
Pete Konesky - State Energy Office
Rebecca Palmer - State Historic Preservation Office
Rich Harvey - Division of Forestry
Richard A. Wiggins - State energy office
Robert Gregg - NTRT
Robert Martinez - Division of Water Resources
Russ Land - Nevada Division of Environmental Protection
Sandy Quilici - Department of Conservation & Natural Resources
Sherry Rupert - Indian Commission
Shimi Mathew - Nellis AFB
Skip Canfield, AICP - Division of State Lands
Steve Siegel - Department of Wildlife, Director's Office
Susan Scholley - Legislative Counsel Bureau
Terri Compton - Department of Transportation
Terry Rubald - Nevada Department of Taxation, Local Government, Centrall
Tim Rubald - Conservation Districts
Timothy Mueller - Department of Transportation
Tod Oppenborn - Nellis Air Force Base
Wes Henderson - NACO
William Cadwallader - Nellis Air Force Base
Zip Upham - NAS Fallon

Letter S5

BRIAN SANDOVAL
Governor

STATE OF NEVADA
COMMISSION ON MINERAL RESOURCES
DIVISION OF MINERALS
400 W. King Street, Suite 106
Carson City, Nevada 89703
(775) 684-7040 • Fax (775) 684-7052
http://minerals.state.nv.us/

Las Vegas Branch:
2030 E. Flamingo Rd.
Suite #220
Las Vegas, Nevada 89119
(702) 486-4343
Fax (702) 486-4345

ALAN R. COYNER
Administrator

ELKO DISTRICT OFFICE		
DM		
ADM		
PLAN/NEPA		
LAW ENF		
TUSCARORA F.O.		
WELLS F.O.		
SUPPORT SRV.		
FIRE		
OPERATIONS		
CA. TRAIL		
PUBLIC AFFAIRS		

July 12, 2012

Janice Stadelman, EIS Project Coordinator
Bureau of Land Management
Tuscarora Field Office
3900 Idaho Street
Elko, NV 89801

Dear Ms. Stadelman:

S5-1 Please be advised the Nevada Division of Minerals supports the Proposed Action and Backfill Alternative for the Rodeo Creek Gold Inc.'s Hollister Underground Mine Project.

Sincerely,

Alan R. Coyner
Administrator

Letter S5 Response

S5-1 Comment noted.

Letter S6

JOHN C. ELLISON
ASSEMBLYMAN
District No. 33

COMMITTEES:
Commerce and Labor
Government Affairs
Natural Resources, Agriculture and Mining
Taxation

State of Nevada
Assembly
Seventy-Sixth Session

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www.leg.state.nv.us

To: Bureau of Land Management 7/14/2012

Re: Hollister Mine permits

Dear Bureau of Land Management, I am expressing my full support for the Hollister Mine and urging all parties to expedite the approval of their permits. It is critical that your approval of this permit so that they can move forward with their plans to create hundreds of
S6-1 jobs and bring billions in tax revenue to our community and state including our country.

The Hollister Mine will bring 250 direct local jobs and approximately 1,500 indirect jobs in a variety of industries such as construction, utilities, manufacturing and retail. The Hollister Mine will be a great economic engine for the area,

Great Basin Gold has shown how they are good Stewarts of the land by utilizing state-of-the-art technology to ensure that during the dewatering process prior to mining; the water will not come into contact with any operations, leaving it pure to be released into Little Antelope Creek. Additionally, all water used during mining will be filtered, cleaned and recharged back into the ground.

All ore will be milled offsite, protecting our air quality. While most of the waste rock will be used
S6-2 as backfill, the remaining rock will be carefully stored and then reclaimed. Great Basin Gold employs the ONLY fully-lined waste rock storage area in the state.

The Hollister Mine will operate fully within the current footprint of the existing mine, with the exception of two escape ways, less than 30 feet in diameter.

Great Basin has an extensive land reclamation plan to restore habitat for wildlife, protect plant life and create natural contours that will remove the marks of past activity. Their goal is to leave the land in better shape than when they found it.

I strongly ask for your support for this permit in a timely manner so we can put Nevada back to
S6-3 work for the betterment of our state. If there is anything I can do to help with this process please feel free to call anytime.

Thank you

Assemblyman John Ellison

Letter S6 Responses

S6-1 Comment noted.

S6-2 Comment noted.

S6-3 Comment noted.

Letter TB1

From: Buster Gibson [mailto:gibson.buster@shopai.org]
Sent: Monday, July 16, 2012 1:51 PM
To: BLM_NV_ELDOHollisterEISTeam
Subject: Comments from the Shoshone-Paiute Tribes on the Hollister Underground Mine Project DEIS

--
Thanks,
Buster Gibson
Tribal Business Council Member
Shoshone-Paiute Tribes
P.O. Box 219
Owyhee, NV 89832
(208) 759-3100 ex. 230
E-mail gibson.buster@shopai.org

Letter TB1 Continued

Formal comments provided to the BLM by the Shoshone-Paiute Tribal Chairman, Terry Gibson

TB1-1 Consultation with the Shoshone-Paiute Tribal government has not occurred in regards to the draft EIS for the Hollister Underground Mine Project. Below is a listing of issues that are extremely important culturally, environmentally, and religiously to the Shoshone-Paiute Tribes and demands further meaningful consultation.

Groundwater and Geochemistry

TB1-2 The mine will be dewatered at a maximum rate of 1,100 gpm on a continuous basis for the 20 year life of the mine resulting in Lowering of the water table and reducing flows in four spring complexes. **This will have a serious impact on the Tribes religious use of the springs in the area.**

TB1-3 95% recovery of the water table would occur 30-35 years after the end of the 20 year mine life. It will take 55 years for the water table to rebound to current conditions. **How do you mitigate for the loss of the religious wellbeing of spiritual use when these areas are dried up.**

Riparian and wetland areas

TB1-4 Ground water drawdown in the vinini formation potentially could reduce flows in four spring complexes and affect approximately 12 acres of wetlands. Based on the projected groundwater drawdown, it is anticipated that approximately 16 wetlands have the potential to be affected by groundwater drawdown in the long term. In addition, reduced flows from springs contributing to antelope, alkali, and squaw creeks may result in the long-term loss of riparian vegetation. Groundwater flows to springs and seeps potentially impacted by the Proposed Action are projected to recover in approximately 50 to 100 years following initial drawdown. **The religious and spiritual use of medicinal, food plants and the impacts to them is not addressed.**

T1B-5 Construction of the proposed project would not remove or disturb riparian or wetland areas. **This statement contradicts information provided in other areas of this document.**

Native American Traditional Values

TB1-6 Affects to Traditional Native American values include potential direct impacts to historic properties, as well as groundwater drawdown impacts to sacred springs. **With regard to this statement it shows a clear need for further consultation on how mitigation will occur.**

Letter TB1 Responses

TB1-1 Comment noted. The government-to-government consultation process is an on-going process and does not end at the completion of the DEIS. Section 3.17.1.3, Native American Consultations, (DEIS) describes the government-to-government consultation activity and information sharing efforts for this Project. The FEIS has been updated with the most recent information regarding government-to-government Tribal consultation activities and information sharing efforts.

TB1-2 Comment noted. Under full disclosure of possible impacts, it is stated that four spring complexes, sourced in the Vinini Formation, on privately owned land (not BLM administered land) could potentially be affected by drawdown (DEIS page 3.17-9, Drawdown Impact to Springs). Seeps and springs in the area sourced by water from the Tertiary Volcanics will not be impacted by this Project. Even the best science does not clearly define if these springs will be impacted; if impacted at what level of impact; if the impacts would be long-term; or the recovery rate should this occur. The Monitoring and Mitigation Plan details the methods by which some springs will be monitored for impacts. Some of these springs within the four spring complexes have been monitored for several years and will continue to be monitored under a different project. Mitigation may be conducted under both projects. The BLM acknowledges that certain impacts cannot be fully mitigated to the satisfaction of the Tribes (DEIS, Section 3.17.4). Possible mitigation measures to lessen impacts are defined in Section 3.17.2.1 as well as the acknowledgement that “Adverse effects to religious, spiritual, or sacred values cannot be monitored or mitigated.”

No change to the text has been made to address this comment.

TB1-3 Comment noted. See response to comment TB1-2.

TB1-4 Comment noted. Concerns regarding medicinal and food plant species have not been identified as an issue through the government-to-government Tribal consultation nor during the scoping period for the DEIS. Currently, the BLM does not have sufficient information or detail to analyze the Project impacts on Native American Traditional Values as they relate to medicinal plants and food plant species. Medicinal and food plant species will be brought forward in future government-to-government Tribal consultation and general discussions with the Western Shoshone people. No change to the text has been made to address this comment.

TB1-5 Comment noted. Surface disturbance (mining, exploration, or construction of facilities) associated with the Proposed Action would not occur in riparian/wetland areas. Implementation of the BMPs for erosion

Letter TB1 Responses Continued

TB1-5 (Cont) control would prevent direct impacts to riparian/wetland areas (DEIS, page 3.9-4).

The proposed discharge of water into Little Antelope Creek under the NPDES permit would increase the size of the current riparian/wetland areas during the period of increased water discharge through the life of the mine. At the end of the life of the mine, discharge of water into Little Antelope Creek would cease, and the riparian/wetland areas would decrease in size and location to the pre-mining state. Riparian/wetland areas are described in the Section 3.9, Riparian and Wetland Areas; Section 3.6, Surface Water Resources and Watersheds; and Section 3.5, Groundwater Resources and Geochemistry. No change to the text has been made to address this comment.

TB1-6 Comment noted. Issues of monitoring and mitigation for potential direct, indirect, and cumulative effects to Historic Properties, Traditional Native American values, sacred springs, and other concerns are discussed in both the PA and the Monitoring and Mitigation Plan. The language within the PA has been an on-going topic within Tribal consultation since its initial draft form. The PA has detailed all monitoring and mitigation, including Western Shoshone input and participation at the levels to which the specific Tribes and Bands chose to participate. Each Western Shoshone Tribe or Band has been offered the role as concurring party to this PA. The Monitoring and Mitigation Plan covers those issues that are outside the scope of the SHPO and ACHP; therefore, not specifically addressed within the PA.

Letter TB1 Continued

TB1-7 Any effects to springs and streams may in turn affect Native American Traditional Values because of the sacredness of water to the tribes. **Again how will this be mitigated?**

Cultural Resources and Regulatory Framework

TB1-8 If the BLM determines that historic properties of traditional, religious and cultural importance would be adversely impacted, then mitigation would be proposed in accordance with the Programmatic agreement (PA). **The PA is wholly Inadequate**.

TB1-9 A PA for a complex project lays out the steps that the agency and consulting parties agree would be taken to consider the effects of the project on historic properties and to resolve any adverse effects. **This PA does not address spiritual and religious impacts that are protected by law.**

TB1-10 A PA among the BLM, Nevada SHPO, ACHP & RCG is currently being prepared for the proposed project. Federally recognized Native American Tribes with cultural ties to the study area have been invited to participate in the development of the PA as concurring parties. **The Tribes would agree to a PA that we are comfortable being signators to not just to concur, that would address our concerns.**

TB1-11 The PA defines general and specific measures that would be undertaken by the BLM, SHPO, and RCG to ensure that the BLM's objectives and responsibilities regarding the protection of historic properties under the NHPA would be fulfilled. **What about the application of the religious use of the area?**

TB1-12 The occurrence of Tosawihi-like tool stone has been observed as far as 93 miles from the source. **This is very limiting the area is much larger than that.**

TB1-13 BLM attended Tribal Council meetings and provided details of the proposed project; previous NEPA analysis in the project vicinity and biological survey data for the proposed project. Tribal council requested that all mining activities stop in the Tosawihi quarries. Also the Tribal council requested copies of the final archaeological reports for the proposed project. During meetings and field visits, Tribal individual participants discussed the importance of Tosawihi as a cultural site; expressed concern with looting of chert deposits. Several meetings were cancelled. **The Tribes have been attempting to develop consultation protocol with the Nevada BLM and have been unsuccessful up to this point.**

TB1-14 The PA among the BLM, Nevada SHPO, Advisory Council on Historic Preservation (ACHP), and Rodeo Creek Gold (RCG) is being developed for an area that encompasses the proposed project. The Tribes and Bands listed were asked to participate in the development of the PA as concurring parties. **Again this PA only addresses section 106 of the NHPA there is no process to apply all of the other relevant acts, congressional mandates, and federal laws that protect Tribal rights.**

Letter TB1 Responses Continued

TB1-7 Comment noted. As explained in the DEIS, the monitoring of tangible items under the language in the PA may aid in continued management of intangible items. The BLM acknowledges that certain impacts cannot be fully mitigated to the satisfaction of the Tribes (DEIS, Section 3.17.4). Possible mitigation measures to lessen these impacts are defined in the DEIS, Section 3.17.2.1, and in the Monitoring and Mitigation Plan. This issue is included within on-going Tribal consultation and future government-to-government consultation. The Monitoring and Mitigation Plan is in Appendix C of the FEIS.

TB1-8 Comment noted. The Draft PA was the subject of continuing consultation efforts at the time the DEIS was published. The PA has been revised, subject to additional consultation and discussion. A copy of the PA is located in Appendix A of the FEIS.

TB1-9 Comment noted. The BLM conducts routine monitoring of the area. The PA focuses on management in addition to routine monitoring. Monitoring includes tangible items such as Historic Properties, TCPs, areas of known concern, and areas of traditional value. This level of monitoring and mitigation of tangible items may indirectly address concerns identified through Tribal consultation regarding intangible items. The BLM acknowledges that certain impacts cannot be fully mitigated to the satisfaction of the Tribes (DEIS, Section 3.17.4, page 3.17-13).

TB1-10 Comment noted. State and federal agencies are, pursuant to regulations, required signatories to the PA. Invited signatories generally sign the PA because they have funding or other obligations under a PA. Concurring Party is defined as "including representatives of local governments, applicants, and certain individuals and organizations with a demonstrated interest in the undertaking due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking's effects on Historic Properties" (36 CFR 800.2(c)(3-5). The PA is an agreement written to define the roles of the Signatory Parties, Invited Signatory Parties, and the Concurring Parties, including how monitoring and mitigation of Historic Properties will be conducted. To date, one written comment letter has been received regarding the PA. This written communication indicates a positive response to the PA.

TB1-11 Comment noted. The BLM acknowledges that certain impacts cannot be fully mitigated to the satisfaction of the Tribes (DEIS, Section 3.17.4, page 3.17-13). The BLM has invited the Tribal and Band governments to be concurring parties under 36 CFR 800.2(c)(3-5). Every effort has been made through Tribal consultation and informational sharing efforts to not only be well informed as to the needs associated with the religious and

Letter TB1 Continued

The PA identifies steps to be taken to 1) Identify cultural resources. 2) Evaluate them to determine if they are eligible for listing on the National Register of Historic Properties (NRHP). 3) Identify potential adverse effects. 4) Develop measures to avoid, reduce, or mitigate adverse effects. And 5) Address inadvertent discoveries. **These issues need to**
TB1-15 **be addressed through meaningful consultation with the Tribes.**

TB1-16 A copy of the PA was mailed to the Tribes and Bands on September 1, 2011. **There has no attempt to further consult with the Tribes on this PA.**

TB1-17 **Tribally there is major concern with the underground activity and expansion surface and subsurface in regards to the mine project. It has been reported to the Tribes that the white chert is being mined under ground and that things of religious significance are being disturbed underground.**

Letter TB1 Responses Continued

TB1-11 (Cont) spiritual needs and practices, but to find creative means in collaboration with the Western Shoshone to protect those practices. The results of these efforts are described within the PA, and will remain a vital piece in the on-going Tribal and/or future government-to-government consultation between the BLM and the governments of the Western Shoshone Tribes and Bands.

TB1-12 Comment noted. The statement defining the distance Tosawihi quarried materials are found from the actual quarries is in relation to the distance from the quarries those materials are commonly found in archaeological sites in the form of tools or tool manufacture. It is not meant to imply either the size of the quarry or the limits of the aboriginal territory of the Western Shoshone people.

TB1-13 Comment noted. While the development of a consultation protocol between the BLM and any Tribal or Band government(s) is beyond the scope of this Project, a consultation protocol would be a welcome collaborative effort in its creation and use and will be gratefully and actively pursued by the Elko District BLM.

TB1-14 Comment noted. The purpose of the PA is to address how the Project will manage, avoid, monitor, and (if necessary) mitigate for effects to Historic Properties and TCPs. The PA is intended to address the Section 106 Process. The other issues raised by this comment are outside of the scope of the PA and would be addressed and resolved through the Tribal consultation and/or future government-to-government consultation process.

TB1-15 Comment noted. Government-to-government consultation activities and information sharing efforts are detailed in Section 3.17.1.3, Native American Consultation, of the DEIS. The BLM continues to engage in Tribal consultation and information sharing, and continues to request government-to-government consultation. An updated summary of the government-to-government consultation activities and informational sharing efforts have been included in the FEIS. The BLM summary notes from the DEIS public meeting in Owyhee, Nevada, also have been included in Appendix B of the FEIS.

TB1-16 Comment noted. The BLM has actively pursued consultation with all local Tribes and Bands. Numerous meetings have taken place with Tribal and Band governments (see FEIS, Table 3.17b). Government-to-government consultation activities and information sharing meetings are described in Section 3.17.1.3 of the DEIS. An updated summary of the government-to-government consultation activities and information sharing have been included in the FEIS. A copy of the PA has been included in Appendix A of the FEIS.

Letter TB1 Responses Continued

TB1-17 Comment noted. The white stone located within the underground workings is different in texture and composition than the white and colored stone found on the surface, known as “Tosawihi chert,” Aipin, or Pisappin. Examples of the underground material (quartz vein material) can be made available for comparison with materials found on the natural ground surface. The “Tosawihi chert” material only reaches a depth of 100 feet below the natural ground surface, whereas the underground mine workings begin at approximately 500 feet below the natural ground surface, which is over 400 feet below any known existence of “Tosawihi chert” (DEIS, Section 3.17.2.1). Chert is a generic term for any microcrystalline, silica-rich sedimentary rock. There are several different origins of chert. The chert referred to as the “Tosawihi chert,” found on the natural ground surface in the vicinity of the Hollister Project area, is from thick beds deposited at the surface as a result of the intrusion of silica-rich hot spring fluids. The “Tosawihi chert” and the quartz vein material are of different geologic ages and are found under different depositional conditions. The “Tosawihi chert” is the youngest of the cherts found in the area at approximately 15 million years in age. Although one should not identify a rock based solely on color, the “Tosawihi chert” is often milky white in color. However, addition of different chemicals present when the rock formed can lead to different colors of rock. The “Tosawihi chert” fluoresces and glows a brilliant green color under black light. Additionally, as noted above, this material was surficially deposited and is found only on the ground surface in the Hollister area. This material, as is evidenced by the artifacts and tools found both in the Hollister and surrounding areas, “fractures” in a certain way that distinguishes it, for example, as excellent toolstone material.

The underground quartz vein material, which is the mineralized zone in which the Hollister ore deposit is found, is a completely different rock type. For example, the underground material does not fluoresce under a black light. Although quartz contains silica, it is not a sedimentary rock like the “Tosawihi chert” described above. The white quartz found in the vein structures underground in the Hollister Project area is weak and filled with holes containing various chemical constituents and soft clay. Therefore, it is not suitable for tool-making.

Letter TB2

NATIONAL SYSTEM OF PUBLIC LANDS

Written Statement Sheet

Hollister Underground Mine Project
Environmental Impact Statement

If you have any issues, concerns, or questions regarding the Hollister Underground Mine Project Draft Environmental Impact Statement (DEIS), please complete this comment sheet, fold it in on the lines with the return address showing, tape it closed, and drop it in the mail to us.

If you prefer, you can fax comments to (775) 753-0255, or e-mail BLM_NV_ELDOHollisterEISTeam@blm.gov. If you have no comments or questions, but would like to be on our mailing list and receive a copy of the Final EIS, please complete the contact information below and mail it to us.

For the Hollister Mine Project the plan if we understand is to be de-watering at 1,100 a minute into Rock Creek, and it is said that there will be no impact downstream. Do we know what will be in that water? At one time mercury was mined in that area. Four to six springs will be directly affected by the drawdown of water. How far out from the actual de-watering will the land be affected? It could be many miles not just the hundred or so acres. Because of the proximity to Tosawihi Quarry it will be very hard to leave that area undisturbed. There will be people wanting to check out the old mines and all the white rock. How will that area be policed?

TB2-1

TB2-2

TB2-3

Please provide your contact information. If you would like to receive copies of the Final EIS, fill in the box on the reverse side.

Before including your address, phone number, e-mail address, or any other personally identifying information (PII) in your comment, you should be aware that your entire comment – including PII – may be made publicly available at any time. While you can ask us in your comment to withhold your PII from public review, we cannot guarantee that we will be able to do so.

Name: Gerald Temoke and Doyle Tybo Title: Elko Band Council

Mailing Address: 1745 Silver Eagle Drive

City, State, Zip Code: Elko, NV 89801

Phone: (775) 738-8889 Fax: (775) 753-5439 E-mail: grtebcchair@yahoo.com

Please hand in your completed comment sheet tonight to ensure your input is considered, or if you would like to mail your comments, please use the address on the reverse side by close of the public comment period ***July 16, 2012.***

Thank you for your interest and participation!

Letter TB2 Responses

TB2-1 Comment noted. To clarify, RCG would not be discharging water directly into Rock Creek. Under the NPDES permit, RCG would discharge water directly into Little Antelope Creek. Little Antelope Creek is a tributary to Antelope Creek. Antelope Creek is a tributary to Rock Creek. Figure 3.6-4 of the DEIS illustrates the relationship between Little Antelope, Antelope, and Rock creeks. It is approximately 13 to 15 miles from the discharge point on Little Antelope Creek to the intersection of Antelope Creek and Rock Creek. The potential effects from groundwater discharges are described on pages 3.6-20 to 3.6-24 of the DEIS. The average discharge under the NPDES permit into Little Antelope Creek is estimated to be approximately 650 gpm, with occasional short-term elevated rates of up to 1,100 gpm (DEIS, page 3.6-20). The potential effects on surface water quality are described on pages 3.6-24 to 3.6-26 of the DEIS. The water discharged into Little Antelope Creek under the NPDES permit would be of good quality and would not require treatment prior to discharge (DEIS, page 3.6-25). The Proposed action states that RCG would continue “its current water management system of pumped water treatment prior to discharge into the rapid infiltration basins (RIBs).” (DEIS page 3.6-25). The Proposed Action creates additional procedures to supplement the current water commingling with mine water. The Nevada Division of Environmental Protection also can require additional water treatment measures if concentrations within Class C Standards for Rock Creek and its tributaries could be affected by the Proposed Action. (DEIS, pages 3.6- 25 to 3.6-26). Section 3.6, Surface Water Resources and Watersheds, of the DEIS describes the water quality of Little Antelope Creek, Antelope Creek, and Rock Creek. No change to the text of the FEIS has been made to address the comment.

TB2-2 Comment noted. To clarify, RCG would not be “dewatering” by actively pumping water at the Hollister Underground Mine Project. RCG would be removing groundwater seepage from the underground workings by collecting it in small impoundments and pumping it to the surface. Section 3.5, Groundwater Resources and Geochemistry, of the DEIS on page 3.5-1 describes the difference between the dewatering at other mines and the groundwater removal that would be conducted at the Hollister Underground Mine Project. Section 3.5, Groundwater Resources and Geochemistry, of the DEIS also describes the extent of the potential drawdown on the groundwater. The groundwater model indicates that the maximum extent of the 10-foot drawdown contour may extend approximately 7.9 miles from the underground workings. However, the drawdown impacts are not expected to affect the land surface. The potential effects of groundwater drawdown on surface

Letter TB2 Responses Continued

TB2-2 (Cont) waters are described on pages 3.6-26 to 3.6-30 of the DEIS. Figures 3.6-4 and 3.6-5 in the DEIS in particular show the four spring complexes that would be potentially impacted by the drawdown. No change to the text of the FEIS has been made to address the comment.

TB2-3 Comment noted. The Hollister Underground Mine Project, the Tosawihi Quarry, the TCPs, and the old (abandoned) mines referred to here are all on public lands. The Quarry, the old mines, and other resources have always been of public interest. The Project would not alter public interests in the old mines. Because the Tosawihi Quarries and TCP are located on public land administered by the BLM, the BLM would continue to monitor and patrol the area. These issues will remain open topics of future government-to-government consultation and discussion. No change to the text of the FEIS has been made to address the comment.

Letter N1

Our membership and services span the globe
10 N Post St Ste 305 | Spokane WA 99201-0705
Phone: 509.624.1158 | Fax: 509.623.1241
E-mail: nwma_info@nwma.org | Web: www.nwma.org

July 2, 2012

Bureau of Land Management
ATTN: Hollister Property
Janice Stadelman
3900 Idaho St.
Elko, NV 89801
BLM_NV_ELDOHollisterEISTeam@blm.gov

Re: Hollister Project Draft Environmental Impact Statement

Dear Ms. Stadelman,

The Northwest Mining Association (NWMA) appreciates the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for Great Basin Gold's Hollister Project in Nevada. The DEIS clearly shows Great Basin Gold is committed to building and operating a mine that will comply with all required environmental laws and regulations in addition to bringing new opportunities to Nevada and our Nation. NWMA wholeheartedly supports the Proposed Action in the DEIS and urges quick approval for the project.

N1-1

Who We Are

NWMA is a 117 year old, 2,300 member, non-profit, non-partisan trade association based in Spokane, Washington. NWMA members reside in 43 states, including more than 500 in Nevada, and are actively involved in exploration and mining operations on public and private lands, especially in the West. Our diverse membership includes every facet of the mining industry including geology, exploration, mining, engineering, equipment manufacturing, technical services, and sales of equipment and supplies. NWMA's broad membership represents a true cross-section of the American mining community from small miners and exploration geologists to both junior and large mining companies. More than 90% of our members are small businesses or work for small businesses. Most of our members are individual citizens. Great Basin Gold is an NWMA corporate member.

Approve the Hollister Mine

A healthy and vibrant domestic mining industry is indispensable to the economic and energy security of the United States. In fact, according to President Obama's Council on Jobs and Competitiveness, mining is the only industry sector to have added jobs since December 2007. It's time we embraced mining as a vehicle for new wealth creation and the high-paying jobs our country desperately needs.

The Hollister Mine represents an excellent opportunity to create sorely needed jobs, generate federal, state and local tax revenue, jumpstart economic growth and help the U.S. become more self-reliant for our critical minerals needs.

N1-2

Letter N1 Responses

N1-1 Comment noted.

N1-2 Comment noted.

Letter N1 Continued

N1-3 The Hollister project will have a minimal disturbance footprint purposely planned to utilize previously existing disturbed areas where possible. In some cases, using reclaimed areas in order to not have to create new disturbance areas. Hollister is an underground mine, therefore the footprint on the surface is as compact as possible to minimize environmental impacts.

N1-4 Since the project area lies within the Tosawihi Quarries Archaeological District, Great Basin Gold is taking a sensitive approach to the cultural resources of the area.Great Basin Gold has proposed no processing facilities in respect to the cultural sensitivity of the area. All ore will be processed at offsite facilities. The proposed action calls for partial backfill of an existing open pit, in response to feedback provided to Great Basin Gold.

N1-5 Currently, the development of cultural resources Programmatic Agreement with BLM to establish procedures for compliance with, Section 106 is in progress. A proposed power line will decrease air emissions as the existing diesel-fired generators can be retired, eliminating an emission source of air.

N1-6 Great Basin Gold is a strong example of environmentally responsible mining and will provide much needed economic and social benefits for many years. The Hollister will provide good-paying jobs for generations, and since mining is a temporary use of the land, after reclamation the land will be used for generations to come.

Mining is the beginning of the supply chain for everything we need and use. The Hollister project mine is located in an area steeped in mining history and rich with natural resources. Thus, it is important we seize the opportunity to responsibly mine this significant resource in Nevada.

Conclusion

N1-7 Again, mining is at the beginning of the supply chain for virtually everything we use on a daily basis. The Hollister project will be an important contributor to that supply chain by providing high paying, family wage jobs in a foundational industry. Mining has an indirect job multiplier that is twice the national average. It will provide jobs in support industries, local stores and restaurants and also provide jobs and the raw materials for people working in American industries that make the products society requires.

N1-8 And, as the DEIS indicates, Great Basin will do this in the most environmentally responsible manner, complying with all environmental laws and regulations designed to ensure clean air, clean water and proper reclamation. Overall, the positive environmental and economic benefits of this mine will be extensive not just in Nevada, but across the country.

The Hollister Project truly is a win-win. NWMA requests that you approve the Proposed Action and issue a final EIS and Record of Decision allowing the mine to be built.

Thank you for your consideration of our comments.

Sincerely,

Laura Skaer
Executive Director

Letter N1 Responses Continued

N1-3 Comment noted.

N1-4 Comment noted.

N1-5 Comment noted.

N1-6 Comment noted.

N1-7 Comment noted.

N1-8 Comment noted.

Letter N2

From: Cook, Clyyne [mailto:CCook@nvenergy.com]
Sent: Thursday, July 12, 2012 4:02 PM
To: Stadelman, Janice R
Cc: mgingerich@nvenergy.com; Sheline, Laura; Simpkins, Lee; Teresa Connor (teresac@us.grtbasin.com)
Subject: RE: Hollister Mine Transmission Line Right-of-Ways

Hi Janice,

Here are our comments on the Hollister DEIS. Our comments are focused on our portion of the project, the 120kV Line.

N2-1 2.4.6.1 We will have steel cross arms, not wood
We will use our standards, not RUS
We will not own the substation
Roads for construction will follow the transmission line where possible, however, due to the terrain, we will use overland travel and spur roads when necessary.

N2-2 2.4.10.6 We would like flexibility regarding Removal of the 120kV line. If we are serving future customers from this line, we don't want to be forced to remove upon mine closure.

As Lee mentioned today, we will be filing our application in the next few weeks that provide additional details on our portion of the project.

Please let me know if you have any questions.

Thanks so much,
Clyyne

Letter N2 Responses

N2-1 Comment noted. The NV Energy standards are substantially the same as the Rural Utilities Services (RUS) standards analyzed in the DEIS. The analysis corridor for the overhead transmission line was analyzed in the DEIS for both travel under or along the transmission line route and for spur roads being constructed or utilized via overland travel from the Antelope Creek Road, where necessary due to terrain. The summary and reference for NV Energy's Hollister Underground Mine Transmission Line Project Plan of Development has been included in the FEIS (Section 2.4.6.1, Addendum).

N2-2 Comment noted. In accordance with applicable regulations, the BLM would issue the ROW to NV Energy for a specified term. All BLM ROWs can be renewed upon a timely application subject to the applicable regulations for a ROW at the time of possible renewal. The ROW would be evaluated at the end of the Project life and during NV Energy's possible renewal periods for continued use or removal. Whether or not the BLM would grant a future renewal of the ROW is speculative, and therefore, the impacts associated with the initial ROW application were analyzed in the DEIS. No change to the text of the FEIS has been made to address this comment.

Letter N3

From: Ray Bacon [mailto:raybacon@clearwire.net]
Sent: Monday, July 16, 2012 2:09 PM
To: BLM_NV_ELDOHollisterEISTeam
Subject: The Hollister Mine permit

Gentlemen:

N3-1 I run the Nevada Manufacturers Association in in my view it is critical to get our mineral development in this nation healthy in order to have a competitive manufacturing sector. Admittedly this project is a gold operation
N3-2 so the impact is a little less than from other minerals. However, it is essentially no further disturbance beyond
N3-3 the existing pit. Approval should be an easy decision and we urge your do do so.

--
Ray Bacon
Nevada Manufacturers Assn
775-882-6662
cel 775-771-8550
nma@nevadaweb.com

Letter N3 Responses

N3-1 Comment noted.

N3-2 Comment noted.

N3-3 Comment noted.

Letter N4

GREAT BASIN RESOURCE WATCH

Working with Communities to Protect Their Land Air and Water

85 Keystone Ave., Suite I, Reno, NV 89503
775-348-1986, www.gbrw.org

July 16, 2012

Bureau of Land Management
attn: Janice Stadelman
Hollister Underground Mine Project Coordinator
3900 East Idaho Street
Elko, NV 89801
janice_stadelman@blm.gov

Re: draft EIS for Proposed Hollister Underground Mine

Dear Ms. Stadelman,

Great Basin Resource Watch was not able to fully review the draft EIS (DEIS) by the comment date, but below are some foremost concerns. We will send more detailed comments later in July, 2012, and request that the BLM consider those as well.

Water Quality

N4-1 Historical contamination remains a problem at the Hollister site with constituent levels observed in the *DGW-1R* well in exceedance of standards. Surface water monitoring in Little Antelope Creek indicates that the mine site may be impacting the water quality as well. There is a significant increase in TDS (total dissolved solids) from monitoring point GBG-02 to GBG-03 (110 to 900 PPM), where flow from the drainage containing MA-1 seep intersects Little Antelope Creek. MA-1 seep is shown as having TDS of 1,400 PPM (DEIS – Fig. 3.5-11). At this point GBRW did not see mitigation to arrest this contamination problem.

N4-2 According to the analysis discussed on pages 3.5-33-34 of the DEIS the proposed action for the West Pit Waste Rock Storage Facility (WRSF) will assure a flow-through condition within the old pit footprint for the perched aquifer. This aquifer is a "water of the State" and there is significant evidence that it will become degraded as it flows through the former pit. Water samples from seasonal ponded water on the West Pit, and from P1 monitoring well show degradation and acid rock conditions.

N4-3 Although, there may already be a violation of state law the proposed action would seem to guarantee that the "waters of the State" will be degraded. The hydrological analysis in the DEIS indicates that the perched aquifer is not connected to the bedrock aquifer and surface water. However, this conclusion could be in error and there needs to be sufficient monitoring to assure that surface water is not additionally contaminated by the West Pit WRSF.

N4-4 There needs to be a mitigation plan to avoid contamination of the perched aquifer and potentially Little Antelope Creek from the West Pit WRDF.

Letter N4 Responses

N4-1 Comment noted. The identified water quality exceedences in surface water along lower Little Antelope Creek and in some wells originate from historical operations at the site from a previous mine operator. They are part of the existing environment. The DEIS notes that most of the time, the MA-1 seep is dry, and that the TDS at GBG 03 noted in Figure 3.5-11 (DEIS) on a single date in April of 2009 is below TDS limits. Further, this figure was intended to provide a snapshot in time, and must be read together with Table 3.6-4 (DEIS), which provides multiple temporal data points. Looking at the TDS data from GBG-02, MA-1 Seep, and GBG-03 as a whole over time, it is not logical to conclude that the fluctuations in TDS at GBG-03 are caused by the MA-1 seep. The Monitoring and Mitigation Plan is included in Appendix C of the FEIS.

N4-2 Comment noted. As clarification to the understanding of the effects of the proposed West Pit WRSF on shallow groundwater in the West Pit, it should be noted that a flow-through condition currently exists when the groundwater surface elevation falls below the bottom of the West Pit. The evaporative sink the pit lake creates ceases to control groundwater flow. The West Pit lake has been dry since late summer of 2009. DEIS Appendix B4 also discusses the isolation of the pit floor from incident precipitation by the presence of the proposed West Pit WRSF. A portion of the precipitation that currently falls on the floor of the West Pit likely percolates through the pit floor to the shallow groundwater, a condition that would be reduced by the construction of the WRSF and could reduce flow-through volumes.

N4-3 Comment noted. It is unclear what the commenter's intent is in referring to the "bedrock aquifer." The BLM assumes that "bedrock aquifer" refers to the Vinini regional aquifer. The aquifers are hydrologically isolated by a clay zone as documented by the monitoring wells (DEIS, Section 3.5, Groundwater Resources and Geochemistry). See Appendix C, Monitoring and Mitigation Plan.

N4-4 Comment noted. Contamination in the perched aquifer is historic contamination. The presence of the West Pit WRSF would only affect the groundwater flow-through relative to periods when the groundwater surface elevation is sufficiently high to create a pit lake (which has not occurred since the summer of 2009) and associated evaporative sink. Otherwise, the flow- through would be unchanged or possibly reduced by the presence of the West Pit WRSF. See Appendix C, Monitoring and Mitigation Plan.

Letter N4 Continued

N4-5 The DEIS predicts that after mine closure of the underground workings will degrade groundwater (pages 3.5-34 through 3.5-37). The mitigation strategy for this is essentially wait and see. Analysis in the DEIS concludes that natural dilution will solve the problem at the boundary of the project. First, there is no such restriction in contaminating the "waters of the State" to a project boundary, so the DEIS is predicting a violation of state law. Second, the analysis is quite uncertain as mentioned in the DEIS, so an active mitigation strategy needs to be developed in advance to avoid degrading ground water.

Mercury Analysis

N4-6 The discussion of potential mercury emissions is brief and insufficient. Ore samples need to be analyzed for mercury content, and there should be a plan for continued ore testing for mercury as mining proceeds. The DEIS indicates that emissions from Hollister ore at Newmont's Midas Operations are expect to result in less than 7 lbs per year, and it is unclear if emissions from Hollister ore at Esmeralda would also result in 7 pounds of mercury per year or that the mill is constrained to that amount of emissions per year. The EIS needs to include the analysis connecting the mercury content in the ore to emissions at the mills.

N4-7 In addition to stack emissions the EIS should contain a fugitive mercury emission analysis. Once the mercury content of the ore, waste rock, tailings is determined then an estimate can be made of the fugitive emissions at the Hollister site and the mill sites. This was done in the Cortez Hills EIS.

Cultural/community related issues

The Hollister mining area is also a significant Western Shoshone cultural site, including the Tosawihi quartz quarry. It appears as though there are still concerns among the Western Shoshone about the cultural impacts of the mine to this area. In the American Indian Religious Freedom Act (AIRFA), Congress stated that "[i]t shall be the policy of the United States to protect and preserve for American Indians their inherent freedom to believe, express, and exercise the traditional religions." 42 USC § 1996 (1982). It is not clear that the BLM in preparing the DEIS has fulfilled its charge in this regard.

N4-8

N4-9 Given what GBRW has reviewed of the DEIS it is our conclusion that the document is still incomplete, and we hope that these concerns as addressed in the final EIS.

Sincerely,

John Hadder
Director

Letter N4 Responses Continued

N4-5 Comment noted. Modeling results provided in the DEIS indicate that concentrations of groundwater constituents predicted to exceed groundwater quality standards within the refilled mine workings would eventually flow in the Vinini aquifer toward the southwestern Project boundary and attenuate to levels at or below groundwater quality standards within approximately 1.5 miles downgradient of the refilled Hollister Mine underground workings. No receptors (e.g., wells, springs, streams) of groundwater from the Vinini aquifer have been identified downgradient of the Hollister Site. Monitoring and mitigation would be required. See Appendix C, Monitoring and Mitigation Plan.

N4-6 Comment noted. The DEIS recognizes that mercury was historically mined in the region. The DEIS analyzes both global mercury emissions and local mercury emissions, and determines the Proposed Action, which includes mining and processing of ore, would "result in a negligible cumulative increase in mercury" (DEIS, page 3.19-21).

The DEIS accurately explains the nature of mercury emissions, placing the environmental fate and potential for mercury emissions from mining and mineral processing into important context. The DEIS states correctly that "[w]hen bound in mineral forms that typically appear in ore (e.g., cinnabar), mercury is a stable compound that remains in solid form" and that mercury is only liberated through dissolution in process solutions or through thermal processes in the form of reactive gaseous mercury (RGM). The latter form of mercury is the primary concern. The mercury emissions impacts from processing at the Midas and Esmeralda mills have been assessed; they have been found to be insignificant. Both mills hold mercury operating permits under the Nevada mercury Maximum Achievable Control Technology (MACT) Program.

Under the maximum collective mercury emissions allowed under both the Esmeralda and Midas permits, mercury emissions are anticipated to be approximately 14 pounds/year or less. Given the extremely low mercury content in the Hollister ore, the Project would cause no increase to this emissions rate, regardless of the MACT cap. The two mills may actually experience a decrease in emissions because the Hollister ore contains so much less mercury per unit volume of ore than other ores. For example, the most recent data from the Nevada MACT Clearinghouse for emissions from the retort unit in October 2009 at the Midas Mill indicates an average ore content of mercury of 141 parts per million (ppm) (nearly 500 times higher than the content from the Hollister Site, which is approximately 0.275 ppm). Test data from other units in other years show much higher mercury content than 141 ppm. For example, the MACT Clearinghouse retort data from 7/15/2008 (Midas Mill unit) indicates a mercury ore content of 1,212 ppm. Thus, the

Letter N4 Responses Continued

N4-6 (Cont) DEIS's conclusion that additional modeling is not required with respect to mercury emissions from these mills as a result of this Project is both accurate and sufficient.

Emissions from the Midas and Esmeralda mills from processing ore from the Hollister Site would not add any significant or likely detectable emissions in the region of the Carlin Trend, and could result in lower emissions than if other ore were processed at those facilities, as noted above.

Continued testing of mercury ore content from the Hollister Site is not necessary. The mercury content for the ore is remarkably consistent. Further, this is confirmed by the mercury testing of both the ore and waste rock that is conducted quarterly under the NDEP Water Pollution Control Permit (NEV 2003107) for the Hollister Project. No change to the text of the FEIS has been made to address this comment.

N4-7 Comment noted. The potential mercury emissions from the Project are negligible, due largely to the fact the Hollister Site is a narrow vein, underground mine that would produce high grade ore from one formation, as opposed to multiple formations mined via open pit methods at the Cortez Hills mine. Thus the Hollister Site has a consistent mercury content. The mercury content of the Hollister ore (~0.275 ppm) is one-thousand (1,000) times less than the mercury content of the refractory ore at Cortez Hills (~245 ppm). For these reasons, comparison with the Cortez Hills Supplemental Environmental Impact Statement (SEIS) is inappropriate.

Mercury in the form of particulate matter, which together with RGM accounts for less than 2 percent of mercury air concentrations, is generally Particle–bound mercury is relatively stable and is not easily converted to methyl mercury (USEPA 1997). The controls already in place to address fugitive particulate emissions at this site, combined with the very low concentration of mercury in the Hollister ore, and the extensive controls for mercury under existing permits at both mills, result in virtually no increased mercury emissions. Therefore, there would be no expected mercury emissions impact from the Proposed Action.

At the Hollister Site, particulate emissions associated with transport would be: 1) controlled and 2) miniscule. As the DEIS notes in Section 3.19.2.1, Air Quality, Proposed Action, particulate emissions from fugitive dust would be mitigated in several ways, including through the minimization of drop heights during loading, and the implementation of dust suppression measures, including a Fugitive Dust Control Plan. Further, because it is high grade, the ore does not accumulate for any appreciable length of time (typically a matter of days) prior to being

Letter N4 Responses Continued

N4-7 (Cont) loaded into transport vehicles, which would then be covered during transport to the mills. No change to the text of the FEIS has been made to address this comment.

N4-8 Comment noted. The Proposed Action allows for the Western Shoshone people to access the Tosawihi Quarries area on their own. The Proposed Action allows for the Western Shoshone people to believe, express or exercise traditional religious activities. The BLM continues to provide information sharing and conduct consultation with the Tribal Councils, which complies with American Indian Religious Freedom Act (AIRFA). The PA is included in Appendix A of the FEIS.

N4-9 Comment noted.

Note: The BLM did not receive any further comments from Great Basin Resource Watch (GBRW).

Letter TO1

Bureau of Land Management

Elko District

Scoping Comment Card

Date: 7-16-2012

Project: Hollister Underground Mine Project

Please check your affiliation below:

BUREAU OF LAND MANAGEMENT
2012 JUL 16 AM 11:09
ELKO, NEVADA

- [X] Individual
- [ ] Private Organization
- [ ] Federal, State or Local Government
- [ ] Citizen's Group
- [ ] Elected Representative
- [ ] Regulatory Agency

Name: FELIX IKE

Organization (if applicable): Tribal Member

Street Address (optional): 1949 Circle Way

City/State/Zip (optional): ELKO, NV. 89801

If you wish to provide written comments, please write your comments below (use back, if needed). Written comments may be submitted using this card, an e-mail, or any other written format provided to the BLM.

Comments: Primary concern is cultural resource area and Native American traditional values. The underground project is so close to the Tosawiki Quarry and TCP location. So much disturbance and destruction to the site and areas adjacent need much more study and dialogue with the Western Shoshone people before the Bureau of Land Management could consider the project to move forward, this notice will be followed up with a complete description of our concerns by the end of this week (7/16-7/20/12), please consider this request. Thank you. FELIX IKE

TO1-1

TO1-2

Please provide your comments to a BLM member or leave at front desk.

Letter TO1 Responses

TO1-1 Comment noted.

TO1-2 Comment noted. The BLM acknowledges that visible impacts to the Tosawihi Quarry area have occurred over many years. Exploration and mining in this area began prior to the implementation of the Surface Management (43 CFR 3809) regulations in 1981, and have continued in the area since the implementation of these regulations. To date, this area has not been withdrawn from mineral entry, thereby allowing entities to stake unpatented mining claims for locatable minerals. Therefore, entities with active unpatented mining claims have a right to prudently explore their claims in an effort to make a discovery. After a discovery has been made, the entity has the right to mine the commodity in a prudent manner. In the DEIS, the BLM acknowledges potential effects to Native American Traditional Values, including the Tosawihi Quarries Archaeological District and TCP (DEIS, Section 3.17). In compliance with NEPA and the NHPA, the BLM has consulted through the government-to-government process and information sharing with the affected governments of federally recognized Indian Tribes and Bands (DEIS, Section 3.17.1.3, Native American Consultation, Table 3.17-1 and the revised Table 3-17b. As a result of this consultation, the DEIS identifies and discusses the potential impacts the Proposed Action may have on Native American Traditional Values (DEIS, Section 3.17.2.1, Proposed Action). The DEIS also states that any adverse effects to a site of Tribal concern would be mitigated through the procedures stated in the PA among the BLM, Nevada SHPO, ACHP, and RCG (DEIS, page 3.17-8). Further actions and potential actions are included in the Monitoring and Mitigation Plan, Appendix C of the FEIS. The local Tribe and Band governments have received copies of the PA. A copy of the PA is included in Appendix A of the FEIS.

Note: The BLM received no further comments from Mr. Ike.

Letter TO2

NATIONAL SYSTEM OF PUBLIC LANDS

Written Statement Sheet

Hollister Underground Mine Project
Environmental Impact Statement

If you have any issues, concerns, or questions regarding the Hollister Underground Mine Project Draft Environmental Impact Statement (DEIS), please complete this comment sheet, fold it in on the lines with the return address showing, tape it closed, and drop it in the mail to us.

If you prefer, you can fax comments to (775) 753-0255, or e-mail BLM_NV_ELDOHollisterEISTeam@blm.gov. If you have no comments or questions, but would like to be on our mailing list and receive a copy of the Final EIS, please complete the contact information below and mail it to us.

July 16, 2012

Elko District office
To be on record.
TO2-1 I'm totally Against Hollester Gold Mines Proposal.
I'm a Western Shoshoni Elder from the Tosa Wihi Band.
TO2-2 This area is a sacred, Holy site that Our ancestors came to pray and heal there people thousands of yrs. Ago and Present. The Chert, Aipin and Pisappin found on surface and deep Underground is associated to the Western Shoshoni's and should not be destroyed.

Please provide your contact information. If you would like to receive copies of the Final EIS, fill in the box on the reverse side.

Before including your address, phone number, e-mail address, or any other personally identifying information (PII) in your comment, you should be aware that your entire comment – including PII – may be made publicly available at any time. While you can ask us in your comment to withhold your PII from public review, we cannot guarantee that we will be able to do so.

Name: Alvina Remo Title: Western Shoshone Comm. Member
Mailing Address: P.O. Box 192
City, State, Zip Code: Owyhee, Nev. - 89832
Phone: 775-757-0591 Fax: _____ E-mail: _____

Please hand in your completed comment sheet tonight to ensure your input is considered, or if you would like to mail your comments, please use the address on the reverse side by close of the public comment period ***July 16, 2012***.

Thank you for your interest and participation!

Letter TO2 Responses

TO2-1 Comment noted.

TO2-2 Comment noted. The BLM acknowledges the importance of the Tosawihi Quarries and TCP area to the Western Shoshone people. As stated in DEIS Section 3.17.4, certain impacts cannot be fully mitigated to the satisfaction of the Tribes. DEIS Section 3.17.2.1 defines possible mitigation measures to lessen impacts and states that "Adverse effects to religious, spiritual, or sacred values cannot be monitored or mitigated." This issue is addressed within the PA, the Monitoring and Mitigation Plan, and will continue to be addressed within on-going future government-to-government consultation and will be monitored utilizing cultural contractors and Tribal monitors. No change to the text of the FEIS has been made to address this comment.

TO2-3 Comment noted. The Tosawihi Chert, Aipin, and Pisappin are all located within either the Tosawihi Quarries or TCPs and are therefore managed under NHPA regulations. None of these materials would be mined or are within areas that would be impacted by mining operations or exploration activities. See response to comment TB1-17 for additional information regarding the Tosawihi Chert material, its characteristics, and where it is found. No change to the text of the FEIS has been made to address this comment.

Letter P1

From: keakaha@gmail.com [mailto:keakaha@gmail.com]
Sent: Thursday, June 28, 2012 11:56 AM
To: BLM_NV_ELDOHollisterEISTeam
Subject: Attn: Janice Stadelman; Hollister EIS

Thank you for the presentation at the Elko Field Office last night. It is obvious that a tremendous amount of time and energy has been spent to analyze the Hollister project for environmental impacts. It has a very clear focus on maintaining a reduced footprint, and has a management plan for the waste rock that takes into account the geochemistry of the materia, and provide proper controls.

P 1-1 It is good to see projects such as Hollister move forward. Hollister represents the ideal that the US, and Nevada in particular, is the leader in safe and environmentally sound mining. The ideal that mining can continue to provide living wage jobs to the people of Nevada, and support the national economy in the proud role as producers.

Thank you,

Jessica Spiegel
1370 Sagecrest Dr. Apt 196
Elko, NV 89801

Letter P1 Response

P1-1 Comment noted.

Letter P2

NATIONAL SYSTEM OF PUBLIC LANDS

Written Comment Sheet
Hollister Underground Mine Project
Environmental Impact Statement

If you have any issues, concerns, or questions regarding the Hollister Underground Mine Project Draft Environmental Impact Statement (DEIS), please complete this comment sheet, fold it in on the lines with the return address showing, tape it closed, and drop it in the mail to us.

If you prefer, you can fax comments to (775) 753-0255, or e-mail BLM_NV_ELDOHollisterEISTeam@blm.gov. If you have no comments or questions, but would like to be on our mailing list and receive a copy of the Final EIS, please complete the contact information below and mail it to us.

I have worked for Great Basin Gold since they started on this project. Because of them, I have a good paying job with benefits. That is a big thing as I'm 63 yrs old. Many mining companies would replace me with someone much younger. I really appreciate that. (P2-1)

My son is employed at Hollister. He is able to provide health care and all other needs for his family. (P2-2)

Great Basin Gold supports the community by donating money, in kind donations and supporting local charities. They should finish this part of the ventur (P2-3)

Please provide your contact information. If you would like to receive copies of the Final EIS, fill in the box on the reverse side.

Before including your address, phone number, e-mail address, or any other personally identifying information (PII) in your comment, you should be aware that your entire comment – including PII – may be made publicly available at any time. While you can ask us in your comment to withhold your PII from public review, we cannot guarantee that we will be able to do so.

Name: Arlene Lunen Title: _____

Mailing Address: 3276 Marla Dr.

City, State, Zip Code: Winnemucca, NV 89445

Phone (775) 625-3500 Fax: _____ E-mail: _____

Please hand in your completed comment sheet tonight to ensure your input is considered, or if you would like to mail your comments, please use the address on the reverse side by close of the public comment period ***July 16, 2012***.

Thank you for your interest and participation!

Letter P2 Responses

P2-1 Comment noted.

P2-2 Comment noted.

P2-3 Comment noted.

Letter P3

NATIONAL SYSTEM OF PUBLIC LANDS

Written Comment Sheet

Hollister Underground Mine Project
Environmental Impact Statement

If you have any issues, concerns, or questions regarding the Hollister Underground Mine Project Draft Environmental Impact Statement (DEIS), please complete this comment sheet, fold it in on the lines with the return address showing, tape it closed, and drop it in the mail to us.

If you prefer, you can fax comments to (775) 753-0255, or e-mail BLM_NV_ELDOHollisterEISTeam@blm.gov. If you have no comments or questions, but would like to be on our mailing list and receive a copy of the Final EIS, please complete the contact information below and mail it to us.

P3-1 The road needs to be well maintained from the mine to Golconda. With all the

P3-2 large trucks buses and private vehicles it is imperative to have a well maintained road.

P3-3 I believe it is a good project and encourage the B.L.M. to finish the process.

Please provide your contact information. If you would like to receive copies of the Final EIS, fill in the box on the reverse side.

Before including your address, phone number, e-mail address, or any other personally identifying information (PII) in your comment, you should be aware that your entire comment – including PII – may be made publicly available at any time. While you can ask us in your comment to withhold your PII from public review, we cannot guarantee that we will be able to do so.

Name: John Carpenter Title: Farmer Vice-Chairman Humboldt County Commission

Mailing Address: 109 Fortitude Dr.

City, State, Zip Code: Elko Nv. 89801

Phone: 775-738-6270 Fax: 775-738-4953 E-mail:

Please hand in your completed comment sheet tonight to ensure your input is considered, or if you would like to mail your comments, please use the address on the reverse side by close of the public comment period ***July 16, 2012***.

Thank you for your interest and participation!

Letter P3 Responses

P3-1 Comment noted. Section 3.3.1.2, Land Use and Access, of the DEIS describes the Project access. Sections 2.2.2 and 2.4.2 of the DEIS describe road maintenance. The road is being maintained in good condition to provide for heavy traffic and to minimize dust with gravel and dust suppressants. No change to the text of the FEIS has been made to address this comment.

P3-2 Comment noted.

P3-3 Comment noted.

Letter P4

NATIONAL SYSTEM OF PUBLIC LANDS

Written Comment Sheet
Hollister Underground Mine Project
Environmental Impact Statement

If you have any issues, concerns, or questions regarding the Hollister Underground Mine Project Draft Environmental Impact Statement (DEIS), please complete this comment sheet, fold it in on the lines with the return address showing, tape it closed, and drop it in the mail to us.

If you prefer, you can fax comments to (775) 753-0255, or e-mail BLM_NV_ELDOHollisterEISTeam@blm.gov. If you have no comments or questions, but would like to be on our mailing list and receive a copy of the Final EIS, please complete the contact information below and mail it to us.

I HAVE VISITED THE HOLLISTER UNDERGROUND MINE PROJECT ON SEVERAL OCCASIONS.

P4-1 IN MY OPINION THEY ARE WORTHY, RESPONSIBLE, AND HONEST.

P4-2 THEY SHOULD RECEIVE AN EIS.

Please provide your contact information. If you would like to receive copies of the Final EIS, fill in the box on the reverse side.

Before including your address, phone number, e-mail address, or any other personally identifying information (PII) in your comment, you should be aware that your entire comment – including PII – may be made publicly available at any time. While you can ask us in your comment to withhold your PII from public review, we cannot guarantee that we will be able to do so.

Name: DALE LUNEN Title: _____

Mailing Address: 3276 MARLA DRIVE

City, State, Zip Code: WINNEMUCCA, NV 89445

Phone: 775-625-3500 Fax: — E-mail: —

Please hand in your completed comment sheet tonight to ensure your input is considered, or if you would like to mail your comments, please use the address on the reverse side by close of the public comment period ***July 16, 2012***.

Thank you for your interest and participation!

Letter P4 Responses

P4-1 Comment noted.

P4-2 Comment noted.

Letter P5

From: Ronda Bachtell [mailto:puffin2468@yahoo.com]
Sent: Sunday, July 15, 2012 6:11 PM
To: BLM_NV_ELDOHollisterEISTeam
Subject: Hollister Mine

Your hearing is Monday the 16th of July. Today is Sunday the 15th and I wanted to add my comment as a resident of the state of Nevada and an educator in the Washoe Cunty School District for 34 years.

After reading about the Hollister Mine I am convinced that it is one of the best projects that have been developed in that area using a former open-pit site.

They have made it clear that water,our most precious natural resource, will be treated with the utmost care and respect.

P5-1 There was a great deal of research and planning done prior to their beginning the approval process for this worthy project.

During the years I was teaching I always taught my students that protecting and respecting our land and its many natural resources was each citizen's responsibility

The individuals that put forth this project have considered every important aspect of protecting, respecting and and then returning the land to its original appearance. Our state should be very pleased and proud to have persons of this caliber leading this project.

Sincerely,
Ronda Bachtell

Letter P5 Response

P5-1 Comment noted.

Letter P6

From: Mike Ray [mailto:mickledapickle79@gmail.com]
Sent: Saturday, July 14, 2012 4:53 PM
To: BLM_NV_ELDOHollisterEISTeam
Subject:

P6-1 I am a resident of nevada and I fully support the great basin gold mine ! I look to the flyer and read the information and I believe them to be responsible mining outfit ! also great that they have jobs are living wage that is a great thing in this economy . sincerely michael ray

Letter P6 Response

P6-1 Comment noted.

Letter P7

Date: July 14, 2012

To Whom It May Concern:

P7-1 I am writing in as a Lander County resident in support of the Hollister Mine. I believe the economic and community impacts far outweigh the environmental impacts. I am hopeful the bureaucratic process will not delay the Hollister project as it will directly and indirectly benefit my community.

P7-2 As an educator for Lander County School District, I believe the Hollister Mine will not only enhance our student population but also provide good paying jobs to Lander and surrounding counties. In addition to increased tax revenue, I have found the local mining companies have impressive corporate responsibilities in regard to bettering the communities they impact (beyond jobs and taxes). They regularly fund requests for school and community needs and have been generous with their local grant programs.

P7-3 That being said, I feel strongly that the impacts from dewatering, drilling, expansion and other proposed mining activity from the Hollister project are minimal. Thus, I urge you to expedite the approval of their permit so they can continue to create jobs and bring tax revenue and enhanced community involvement to Lander County.

Thank you for your time,

Amy Nelson

Letter P7 Responses

P7-1 Comment noted.

P7-2 Comment noted.

P7-3 Comment noted.

Letter P8

From: LEE BOSCH [mailto:lbosch3@gmail.com]
Sent: Monday, July 16, 2012 9:56 AM
To: BLM_NV_ELDOHollisterEISTeam
Subject: hollister mine

P8-1 HELLO, JUST A QUICK TO SHOW OUR SUPPORT FOR THE HOLLISTER MINE PROJECT. WE HAVE PROPERTY AND HOUSES IN THE AREA AND WE ARE ALL IN FAVOR OF THEIR PROJECT. THANKS LEE BOSCH

Letter P8 Response

P8-1 Comment noted.

Letter P9

From: Annette White [mailto:annette.white42@gmail.com]
Sent: Monday, July 16, 2012 10:30 AM
To: BLM_NV_ELDOHollisterEISTeam
Subject: Support for Hollister

To Whom it May Concern;

P9-1 Please expedite the approval of the EIS for the Hollister Mine. I believe that Great Basin Gold can mine in a safe and responsible manner, thus creating jobs and stimulating the economy. Their commitment to the environment through their state of the art water reduction plan, and use of best management practices for sediment reduction and dust generation make this a quality project worth pursuing for this area.

Thank you,

Annette White

Letter P9 Response

P9-1 Comment noted.

Letter P10

Bureau of Land Management
Hollister Underground Mine Project
Janice Stadelman
3900 Idaho St., Elko, NV 89801-4611

July 16, 2012

Re: The Hollister Underground Mine Project

Dear Ms. Stadelman:

P10-1 I am Katrina Maczen-Cantrell, an enrolled Western Shoshone tribal member and a direct descendant of Tosawhihi. I would like to go on record of grave objection to the continued and increasing degradation of the water, land and cultural sites of significance by the Hollister Underground Mine Project located at Townships 37 and 38 North, Range 48 East, Ivanhoe Mining District, Elko County, Nevada.

Since mid-2007 Great Basin Gold has focused on permitting additional development to prepare for production and the addition of underground and surface drilling. I submit the following questions:

P10-2 1) How will BLM measure the negative health impacts of underground mining practices conducted by The Hollister Underground Mine Project?

P10-3 2) BLM has an obligation to the preservation and protection of Tosawhihi. Please outline how you plan to provide access and protection to this sacred site.

P10-4 3) Please provide me with the science-based evidence you have to support your knowledge of the impacts underground mining have on the water supply.

P10-5 4) What is the impact on the environment of the increased use of diesel fuel generators used to generate additional electricity to the Hollister Gold Project?

P10-6 5) Hollister Mine received 18 violations of health or safety; has 20 legal actions before the Federal Mine and Safety and Health Review Commission; and 58 proposed assessments from MSHA under the mine Act. Please verify this as accurate data.

1

Sincerely,

Katrina Maczen Cantrell
Kcantrell@telis.org
PO BOX 254
Round Mountain, CA 96084
530-941-9960

Letter P10 Responses

P10-1 Comment noted.

P10-2 Comment noted. The BLM does not anticipate that there would be negative health effects caused by the Project. People working near the vent raises or portals may hear or feel air coming from the mine openings. Air is circulated in the underground workings so that the miners can breathe; this escaping air that can be heard at the vent raise is this circulated air. Chemicals in the rock and soil (e.g., mercury, antimony, arsenic, and other metals) were deposited millions of years ago when the gold deposit was formed and occur naturally in the rock. The rock breaks down to form soil. Therefore, the soil over the gold deposit may contain chemical constituents (e.g., mercury, antimony, arsenic, and other metals). This has occurred for millions of years. Measuring the negative health impacts of underground mining practices conducted by the Project on people is out of the scope of the DEIS and the BLM's authority. Health and safety issues at the mine are under the jurisdiction and authority of the Mine Safety and Health Administration (MSHA). No change to the text of the FEIS has been made to address this comment.

P10-3 Comment noted. The BLM understands the importance of the Tosawihi Quarries and the TCP and has taken steps to protect them from the Project impacts. Public access to the Tosawihi Quarry area is not currently restricted and will not be restricted as a result of this Project. The Tosawihi Quarry area is accessible without entering the mine property. The only areas that would be restricted from public access for safety reasons would be the mine facilities (e.g., Rapid Infiltration Basin [RIBs]), areas within the existing perimeter fence, such as the east and west pits, Hatter production shaft, etc.) and active exploration sites (drilling or reclamation in progress). Potential impacts to the Tosawihi Quarries Archaeological District and the TCP areas would be mitigated through actions outlined within the PA (FEIS, Appendix A) and the Monitoring and Mitigation Plan (FEIS, Appendix C). As per the PA, the BLM would be coordinating on-going monitoring of the TCP and Historic Properties within the Project Area Potential Effect (APE) for disturbances or damage to those properties. The PA details the collaborative monitoring effort utilizing contracted and Tribal monitors. These issues would continue to be addressed during the on-going government-to-government consultation process and information sharing throughout the life of the Project. No change to the text of the FEIS has been made to address this comment.

P10-4 Comment noted. Sections 3.5, Groundwater Resources and Geochemistry, and 3.6, Surface Water Resources and Watersheds,

Letter P10 Responses Continued

P10-4 (Cont) of the DEIS describe the affected environments and environmental consequences that the Proposed Action would have on water resources. Details regarding the modeling for water resources can be found in the appendices for the DEIS. A copy of the EIS can be found on the BLM website at: www. blm.gov/rv5c, or you may request a copy of the EIS from the BLM Elko District Office. You also may make a formal request for information under the Freedom of Information Act, should the commenter wish to view the materials in greater detail. No change to the text of the FEIS has been made to address this comment.

P10-5 Comment noted. There will not be an increase in the use of diesel fuel generators for this Project. The Proposed Action eliminates the use of the onsite generators except for emergency backup power and replaces them with electric power from the proposed transmission lines. Since the publication of the DEIS, the generators have been replaced with generators that operate on cleaner-burning LNG. Because of this change in generator fuel types, the original Table 3.19-4 in the DEIS overstates current emissions at the Hollister Site. All emissions categories should decrease as a result of the change in equipment and fuel. The FEIS has been modified as necessary to reflect the change from diesel generators to LNG generators.

P10-6 Comment noted. The comment is outside of the scope of the BLM's authority. Health and safety issues at the mines are under the jurisdiction and authority of the MSHA. In order to verify the information, the commenter will have to contact the MSHA. No change to the text of the FEIS has been made to address this comment.

Letter P11

-----Original Message-----
From: paul findlay [mailto:pfindlay@citlink.net]
Sent: Monday, July 16, 2012 4:09 PM
To: BLM_NV_ELDOHollisterEISTeam
Cc: Katrina Cantrell
Subject: Objection Janice Stadelman

P11-1 I katrina Maczen Cantrell an enrolled Western Shoshone tribal member object to the Hollister Underground Mine Project.
Please contact me in order to better address my concerns.

Katrina Maczen Cantrell
Kcantrell@telis.org

Letter P11 Response

P11-1 Comment noted. See Letter P10.

Letter P12

From: esmeralda saldivar [mailto:saldivar41@hotmail.com]
Sent: Saturday, July 14, 2012 4:05 PM
To: BLM_NV_ELDOHollisterEISTeam
Subject: permit approval

To whom it may concern,

P12-1 As a citizen of Battle Mountain, Nv., I was made aware of GBG's goal of reopening the Hollister Mine, cannot move forward without the permits required from your department. I would sincerly hope that you take into consideration the boost in revenue, and all that it can help the economy and especially our community. There are still a lot of unemployed people in our town. Lets give them a chance at a job and get them off welfare.
I trust that GBG is and will be responsible about protecting the land, water and enviroment. I hope you will expedite the permits required.

Thank you,
E. Saldivar

Letter P12 Response

P12-1 Comment noted.

Letter P13

From: Tim Janke [mailto:tmjanke@sbcglobal.net]
Sent: Saturday, July 14, 2012 4:49 PM
To: BLM_NV_ELDOHollisterEISTeam
Subject: Project Support

P13-1 I am sending this email to urge the BLM to approve the Great Basin Gold Hollister Project. This project will bring significant positive economic imact to the Humboldt/Elko County area without negative environmental inpact. The area will be better environmentally with your approval than without it.

Regards,
Tim Janke
Winnemucca resident

Letter P13 Response

P13-1 Comment noted.

Letter P14

-----Original Message-----
From: jfedewa1630@yahoo.com [mailto:jfedewa1630@yahoo.com]
Sent: Sunday, July 15, 2012 10:07 AM
To: BLM_NV_ELDOHollisterEISTeam
Subject: Hollister mine

P14-1 Please approve the hollister mine our community can use the jobs and the tax revenue.

Sent from my iPhone Jeffrey

Letter P14 Response

P14-1 Comment noted.

Letter P15

-----Original Message-----
From: B Keith Byer [mailto:bkeithbyer@yahoo.com]
Sent: Sunday, July 15, 2012 11:23 AM
To: BLM_NV_ELDOHollisterEISTeam
Subject: Hollister Mine

Dear Sirs,

As a concerned Nevada resident, I wanted provide my input into your upcoming review of the Hollister Mine environmental impact study.

As you may know, Nevada's rich history is intertwined with mining. Many of our families owe their livelihood to mining and many of our young people aspire to work in mining. With some of the highest unemployment in the US, such mining projects are critical to the fabric of our mining communities. Mining provides diverse employment opportunities to our working families. From construction workers, to mining and civil engineering, accounting, and management; mining provides employment to a rich variety of Nevada residents regardless of their educational achievements. P15-1

The salaries paid to mine workers cycles through our local communities and helps struggling family owned businesses such as gas stations, drug stores, and grocery stores. Without the purchases by mine employees, our small communities can be devastated. When our small towns die, people are forced to drive many miles for essentials which wastes precious oil and pollutes our air. P15-2

While mining can have a short term environmental impact, responsible companies manage the long term impacts and benefit society. P15-3

I hope you allow this vital project to continue. Nevada families are depending on these jobs. Our schools, businesses, and communities are depending on these families. P15-4

Best Regards,

B Keith Byer

Letter P15 Responses

P15-1 Comment noted.

P15-2 Comment noted.

P15-3 Comment noted.

P15-4 Comment noted.

Letter P16

From: Jonathan G Price [mailto:jprice@unr.edu]
Sent: Monday, July 16, 2012 6:56 AM
To: BLM_NV_ELDOHollisterEISTeam
Subject: comments on Hollister

Dear Colleagues:

P16-1 I write to express my support for Great Basin Gold's Hollister Project in Elko County. It will create new jobs while minimally disturbing the environment for a few years.

Thank you.

Jonathan G. Price

****

JONATHAN G. PRICE, LLC
2210 Andromeda Way
Reno, Nevada 89509-3802
USA
E-MAIL: JonathanGPrice@alumni.ls.berkeley.edu
CELL PHONE: 775-200-8077 or 775-250-2145
HOME TELEPHONE: 775-329-8011

Jonathan G. Price, Ph.D.
State Geologist Emeritus
Nevada Bureau of Mines and Geology
University of Nevada, Reno/Mail Stop 178
Reno, Nevada 89557-0088
E-MAIL: jprice@unr.edu

Letter P16 Response

P16-1 Comment noted.

Letter P17

NATIONAL SYSTEM OF PUBLIC LANDS

Written Statement Sheet

Hollister Underground Mine Project
Environmental Impact Statement

If you have any issues, concerns, or questions regarding the Hollister Underground Mine Project Draft Environmental Impact Statement (DEIS), please complete this comment sheet, fold it in on the lines with the return address showing, tape it closed, and drop it in the mail to us.

If you prefer, you can fax comments to (775) 753-0255, or e-mail BLM_NV_ELDOHollisterEISTeam@blm.gov. If you have no comments or questions, but would like to be on our mailing list and receive a copy of the Final EIS, please complete the contact information below and mail it to us.

P17-1 The Tosawihi Quarries Archaeological District needs to be protected from this mine's expansion. They already have been desecrating & destroying our sacred rocks on the ground & underground. Hollister

P17-2 Mine is getting their Ore out w/out the luxury additions of having Power lines & larger permanent buildings constructed out there in this peaceful/prestine a remote area. This archeological site needs to be preserved.

P17-3 their needs to be funding set aside for Tribal Monitors to watch this area 24/7/365 days/yr. The cultural uses of the natural

P17-4 rocks inhabited at the Tosawihi area are significant. Western Shoshones have been using this sacred place for thousands of years for prayers, for gathering the holy medicine rocks for ceremonial purposes - they can only be found in abundance in this area. No other place in the would can you find this kind of Chert & the other holy rocks all in one place. This mine should not

P17-5 be given opportunity to destroy our rights to gather & have access to the Quarry area - It is our heritage, history & spiritual identity. Stay AWAY Mines!

Please provide your contact information. If you would like to receive copies of the Final EIS, fill in the box on the reverse side.

Before including your address, phone number, e-mail address, or any other personally identifying information (PII) in your comment, you should be aware that your entire comment – including PII – may be made publicly available at any time. While you can ask us in your comment to withhold your PII from public review, we cannot guarantee that we will be able to do so.

Name: Cindy Premo Title: _____

Mailing Address: PO Box 445

City, State, Zip Code: Owyhee, NV 89832

Phone: _____ Fax: _____ E-mail: _____

Please hand in your completed comment sheet tonight to ensure your input is considered, or if you would like to mail your comments, please use the address on the reverse side by close of the public comment period ***July 16, 2012***.

Thank you for your interest and participation!

Letter P17 Responses

P17-1 Comment noted. The BLM understands the importance of the Tosawihi Quarries and the TCP and has taken steps to protect it from the Project impacts. Potential impacts to the Tosawihi Quarries and the TCP would be mitigated through actions outlined within the PA. Unavoidable adverse effects to Historic Properties, including portions of the Tosawihi Quarries Archaeological District and properties of traditional religious and cultural importance to the Western Shoshone that are eligible for the NRHP would be minimized or mitigated as stipulated in the PA between the BLM, SHPO, ACHP, and RCG. As per the PA, the BLM would be coordinating on-going monitoring of the TCP and Historic Properties within the Project APE for disturbances or damage to those properties. The PA details the collaborative monitoring effort utilizing cultural contractors and Tribal monitors. These issues would continue to be addressed during the future government-to-government consultation process throughout the life of the Project. No change to the text of the FEIS has been made to address this comment.

P17-2 Comment noted. With the expansion of underground activities, the creation of above ground facilities would be necessary. To maintain the environment, restrictions on air quality, sound quality, etc. have been studied and mitigation measures put in place. The visual impact of the new operations to the TCP is minimal and restricted to a small area of the TCP.

P17-3 Comment noted. As stated in the DEIS, Section 3.17.4, the BLM acknowledges that certain impacts cannot be fully mitigated to the satisfaction of the Tribes and that adverse effects to religious, spiritual or sacred values cannot be monitored or mitigated. This issue is addressed within the PA (FEIS, Appendix A), the Monitoring and Mitigation Plan, and will continue to be addressed during future government-to-government consultation and information sharing. The PA details the collaborative monitoring effort utilizing contracted and Tribal monitors. Historic properties and TCPs are protected under the NHPA. The TCP and the Archaeological District are monitored throughout the year by the BLM archaeologists, law enforcement, and other BLM staff members working in the area. The BLM encourages individuals who know the Tosawihi Quarry area to keep the BLM apprised of any suspicious activities.

The BLM does not engage in discussions regarding funding or on-going monitoring and other work of this type with individuals. No change to the text of the FEIS has been made to address this comment.

P17-4 Comment noted. The BLM acknowledges the importance of the Tosawihi Quarries and TCP area to the Western Shoshone people. The

Letter P17 Responses Continued

P17-4 (Cont) Tosawihi, Aipin, and Pisappin are all within areas of protection of the TCPs. They also are protected under the PA (FEIS, Appendix A). None of these materials would be mined or are within areas of impact. No change to the text of the FEIS has been made to address this comment.

P17-5 Comment noted. Public access to the Tosawihi Quarry area would not be restricted as a result of this Project. The Tosawihi Quarry area is accessible without entering the mine area. The only areas that would be restricted from public access for safety reasons would be the mine facilities (e.g., RIBs, areas within the existing perimeter fence, such as the East and West pits, Hatter Production Shaft, etc.) and active exploration sites where bull dozers or other heavy equipment are actively working (drilling or reclamation in progress). No change to the text of the FEIS has been made to address this comment.

4.0 References *(updated since June 2012 Draft EIS)*

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Brown and Caldwell. 2011b (as cited in June 2012 Draft EIS). Technical Memorandum No. 1: Discharge Evaluation for Little Antelope Creek. Prepared for Rodeo Creek Gold Inc. November 4, 2011. 29 pp.

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Bureau of Land Management (BLM) 2012a. Surface Management Handbook H-3809-1: Revised Manual incorporates changes in policies resulting from revision of regulations in 43 CFR 3809. September 17, 2012.

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Bureau of Land Management (BLM). 2010d (as cited in June 2012 Draft EIS). Final Supplemental Environmental Impact Statement Leeville Project Cumulative Effects. BLM Elko District Office, Elko, Nevada. April 2010.

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Rodeo Creek Gold (RCG). 2013a. Personal communication from T. Conner, Environmental Manager, RCG, to S. Duncan, Project Manager, AECOM. January 2013 to May 2013.

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Appendix A

Programmatic Agreement

PROGRAMMATIC AGREEMENT
AMONG
THE DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT TUSCARORA FIELD OFFICE,
THE NEVADA STATE HISTORIC PRESERVATION OFFICER,
ADVISORY COUNCIL ON HISTORIC PRESERVATION
AND
RODEO CREEK GOLD, INC.
REGARDING THE HOLLISTER UNDERGROUND MINE PROJECT

WHEREAS, Rodeo Creek Gold, Inc. ("Operator") currently operates the Hollister Development Block Underground Exploration Project on unpatented mining claims located on public lands in Elko County, Nevada, and has submitted a proposed plan of operations (PoO) titled the Hollister Underground Mine Project, which would consist of (1) developing the currently permitted underground bulk sampling and underground exploration project into a full scale underground mine, and (2) combining certain notice-level surface exploration activities into a single plan of operations (collectively, the "Project"); and

WHEREAS, the BLM has determined that the Project is an undertaking as defined in the National Historic Preservation Act (NHPA) because it involves public lands and federal permits; and

WHEREAS, the BLM has consulted with the SHPO pursuant to Part 1, Section II.A.3 & 4 and Part 1, Section II.B.2 of the State Protocol Agreement dated February 3, 2012, between the Nevada State Office of the BLM, and the SHPO (Protocol), and the BLM has determined that the mining and mineral exploration activities associated with the Project shall have adverse effects on properties eligible for the National Register of Historic Places (NRHP) including portions of the Tosawihi Quarries Archaeological District (District) and properties of traditional religious and cultural importance to Tribes that are eligible for the NRHP (herein referred to as Traditional Cultural Properties or TCPs); and

WHEREAS, the ACHP has been invited to participate in consultation and has chosen to participate pursuant to 36 CFR 800.6(a)(1)(iii) and is a Signatory to this Agreement; and

WHEREAS, the BLM, the SHPO, and the ACHP are collectively referred to herein as the "Signatory Parties"; and

WHEREAS, the BLM has consulted with the SHPO, the ACHP**,** and the other Consulting Parties to create this Agreement pursuant to 36 CFR 800.6 and 800.14(b) of the ACHP's regulations implementing Section 106 of the NHPA, 16 USC 470f; and

WHEREAS, the Operator has participated in the development of, and will be an Invited Signatory to this Agreement; and

WHEREAS, Section 106 consultation with Tribal Governments and interested Western Shoshone organizations and groups in relation to earlier mining and mineral exploration in the Project area has been ongoing since 1988; and

WHEREAS, Section 106 consultation with Tribal Governments and interested Western Shoshone organizations and groups about the Project began on July 30, 2009, with letters to the Te-Moak Tribe of Western Shoshone Indians and its constituent bands, the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation, the Ely Shoshone Tribe, the Yomba Shoshone Tribe, the Confederated Tribes of the

Goshute Reservation, the Western Shoshone Committee of Duck Valley, and the Duckwater Shoshone Tribe, informing them about the Project, opening dialogue about issues of traditional religious and cultural significance, and collaborating on management considerations in relation to specific items of significance; and

WHEREAS, the governments of the Te-Moak Tribe of Western Shoshone Indians, the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation, the Ely Shoshone Tribe, the Yomba Shoshone Tribe, the Confederated Tribes of the Goshute Reservation, the Western Shoshone Committee of Duck Valley, and the Duckwater Shoshone Tribe have been invited to participate in Consultation and each have been invited to be a Concurring Party to this Agreement; and

WHEREAS, the BLM, in consultation with SHPO, has designated two Areas of Potential Effect (the APEs) as more fully described in Stipulation B, and depicted in Appendix B; and

WHEREAS, Operator's PoO under 43 CFR 3809.11 are to conduct surface mineral exploration and extraction activities within the APEs that are multi-year in scope; and

WHEREAS, in accordance with the requirements of Section 106 of the NHPA (Section 106), the Signatory Parties are entering into this Agreement because the effects of the Project on historic properties cannot be fully determined prior to the approval of the undertaking; and

WHEREAS, this Agreement is intended to cover all aspects of compliance with Section 106 associated with the Project; and

WHEREAS, the BLM has elected to use and coordinate the National Environmental Policy Act commenting process as part of the public involvement process for Section 106 of the NHPA, as provided for in 36 CFR 800.2(d)(3); and

WHEREAS, the public has been informed about the Project through a Federal Register Notice dated April 19, 2010, (75 FR 20379) for the EIS scoping and June 1, 2012 (77 FR13356) for the public comment period on the Draft EIS; and through scoping meetings conducted on May 10, 2010, in Winnemucca; May 11, 2010, , in Battle Mountain; May 12, 2010, in Elko; May 13, 2010, in Mountain City; and May 20, 2010, in Owyhee; and meetings on the Draft EIS on June 26, 2012, in Battle Mountain; June 27, 2012 in Elko; and July 11, 2012, in Owyhee;

WHEREAS, the BLM, the SHPO and the ACHP are Signatories to that certain Memorandum of Agreement (Ivanhoe MOA) effective October 5, 1988, with Galactic Services, Inc. regarding treatment of Historic Properties for the Ivanhoe Mine Project, a previous open-pit mining operation within the APEs; and

WHEREAS, Galactic Services, Inc. is no longer conducting operations within the APEs and Operator is the indirect successor in interest to certain unpatented mining claims and facilities from these previous operations, and the BLM, the SHPO and the ACHP wish to terminate the Ivanhoe MOA and Signatory Parties desire to enter into this Agreement; and

NOW, THEREFORE, the BLM, the SHPO, the ACHP, and Operator agree that the Project shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on Historic Properties.

Capitalized terms used herein and not defined herein have the meanings given to them in 36 CFR 800.16, the Protocol, or in the definitions set forth in Appendix A.

STIPULATIONS

The BLM shall ensure that the following measures are carried out:

A. PURPOSE AND INTENT

This PROGRAMMATIC AGREEMENT (Agreement), is by and among the Tuscarora Field Office of the Bureau of Land Management (BLM), the Advisory Council on Historic Preservation (ACHP), the Nevada State Historic Preservation Office (SHPO) and Rodeo Creek Gold, Inc. (Operator).The purpose of this Agreement is to take historic properties into account regarding compliance with Section 106 for the Project proposed and developed by Operator. This Agreement defines general and specific measures that will be undertaken by the BLM, the SHPO, and Operator to ensure that the BLM's objectives and responsibilities under the NHPA will be fulfilled.

B. AREAS OF POTENTIAL EFFECTS

The Areas of Potential Effect (APEs) were established by the BLM, in consultation with the SHPO, to include all lands that may be directly, indirectly, or cumulatively affected by the Project. The two designated APEs for the Project, as more fully described in Appendix B, are for mining activities and facilities (Mining APE) and for surface exploration (Exploration APE). The Mining APE is defined as the lands for which the Project proposes surface disturbance for mining operations and ancillary facilities associated with the transition of the Hollister Development Block Project to the Hollister Underground Mine Project. The Exploration APE includes areas within which Operator may propose surface exploration activities. Within the Exploration APE, the BLM will designate exploration-specific APEs in response to Operator exploration proposals. The BLM, in consultation with the SHPO, the ACHP, Tribal Governments, Consulting Parties and Operator, may amend the APEs as needed through an amendment to this Agreement.

C. ROLES AND RESPONSIBILITIES

1. **The BLM Roles and Responsibilities.**

    a. The BLM shall ensure that measures within this Agreement are carried out. This includes but is not limited to: ensuring that all Consulting Parties carry out their responsibilities; participating in ongoing Section 106 consultation; overseeing all Section 106 and other Cultural Resources work; assembling all submissions to the SHPO and to other Consulting Parties – including reports, determinations of Eligibility, and treatment or data recovery plans; and for seeking the SHPO concurrence with all agency compliance decisions. Any submissions to the SHPO or Consulting Parties not from the BLM will be considered as informational only and will not trigger any compliance timelines or actions.

    b. The BLM Manager will be the point of contact for BLM's review of reports, and collating responses to products required to implement this Agreement, including but not limited to: inventory reports, determinations of Eligibility, treatment options and plans, determinations of effects, monitoring reports, treatment or data recovery reports, etc.

    c. The BLM shall ensure that Cultural Resources work conducted pursuant to this Agreement is carried out by, or under the direct supervision of, Contractors.

2. **The ACHP Roles and Responsibilities.**

The ACHP shall provide their expertise and advice for compliance with and implementation of the Agreement, and participate in dispute resolution about this Agreement and mitigation designed to address adverse effects to Historic Properties (as discussed in Section F).

3. **Operator Roles and Responsibilities.**

a. Operator will appoint a point of contact for the Project and provide the BLM with any information reasonably necessary for the BLM to implement this Agreement.

b. Operator, in cooperation with the BLM and the SHPO, shall ensure that all Operator Project personnel and contractors have received specific Cultural Resources training (as specified in D.10.b), which includes direction not to engage in the collection of Cultural Resources or items of archaeological interest. Operator shall cooperate with the BLM to prevent violations of the Archaeological Resources Protection Act (ARPA; 16 U.S.C. 470aa-mm).

c. Operator shall bear the reasonable expense of Contractors and Tribal Monitors (should they request payment) to perform Section 106 compliance under this Agreement, including inventory, identification, evaluation, monitoring, and mitigation of Project-related adverse effects to Historic Properties within the APE. Such costs may include, as appropriate and shall not be limited to: pre-field planning, fieldwork, post-fieldwork analysis, research, interim and summary report preparation, and artifact and records storage (curation). If Operator withdraws its request for Authorizations to Proceed (ATP), then Operator shall not be required to incur further expense for identification, evaluation or treatment for any Cultural Resources except for completing work (fieldwork and post-fieldwork activities including production of reports covering the description and analysis of all data collected up to that point, and curation of project materials) that is ongoing as of the date of withdrawal or disapproval, or work required in connection with reclamation for the activities subject to the withdrawn ATP.

D. PROCESS

1. **Initiation.** The BLM has identified interested persons and Tribal Governments pursuant to the Protocol, the NHPA, and the NEPA scoping process and has involved, and will consult with them throughout the Project.

2. **Identification**. Operator shall provide for a qualified Contractor (as specified in C.1.c and Appendix A) to perform the identification efforts in this Agreement. Areas of proposed surface disturbance in the applicable APEs shall be inventoried at the Class III level. Class III inventories shall be conducted in accordance with the following:

a. Record searches will be conducted to identify Historic Properties within the applicable APE which could be directly, indirectly, or cumulatively affected by the Project (The distinction between Cultural Resources and Historic Properties is

clarified in Appendix A). BLM will evaluate whether Historic Properties identified in Class III inventories that are ten years old or older should be revisited to relocate such resources and re-evaluate condition and Eligibility determinations, and obtain relevant information necessary for avoidance, treatment or other mitigation.

b. All newly identified Cultural Resources or updated site records within the APE will be recorded in accordance with the Protocol. Sites within the District are referred to as Loci.

c. Artifacts only will be collected when authorized by the BLM.

d. Cultural resources extending outside the survey area will be recorded to the extent necessary for Eligibility determinations.

e. Linear Sites will be recorded in accordance with the Protocol. Linear Sites will be recorded outside of the survey area only to the extent necessary to determine Eligibility.

f. The BLM shall consult with BLM – identified Tribal Governments, tribal groups, and interested persons within the tribal communities of interest to identify TCPs or properties of traditional religious and cultural significance.

3. **Evaluation.** The BLM, in consultation with the SHPO, Tribal Governments, and other Consulting Parties shall evaluate all Cultural Resources (including TCPs) identified within the applicable APEs for Eligibility to the NRHP (utilizing criteria found in 36 CFR 60.4) as inventories and revisits are completed.

a. The BLM shall require the Contractor conducting the Class III inventory to make initial recommendations regarding Eligibility, but determinations of Eligibility will be made by the BLM in consultation with the SHPO, taking into consideration the views of the Consulting Parties.

b. The BLM shall apply the NRHP criteria to properties proposed as TCPs in consultation with Tribal Governments and other Consulting Parties, and with the SHPO's concurrence determine whether such properties are eligible.

c. If proposed surface disturbance is within a previously defined Historic or Archaeological District, all identified Historic Properties (also known as Loci) in the applicable APE that are located within that District will be evaluated and classified as either contributing or noncontributing to the Eligibility of the District.

d. The BLM, in consultation with the SHPO and Tribal Governments, may authorize an evaluation plan under an ARPA permit (which may involve minor excavation, archaeological probes or tests). In developing a subsurface evaluation plan, the BLM shall ensure that any testing is limited to defining the nature, density, and distribution of Cultural Resource materials in order to provide the minimum data necessary to make final evaluations of Eligibility and to devise appropriate treatment options.

e. The BLM shall ensure that Cultural Resources identified within the applicable APE are evaluated for Eligibility prior to initiation of activities that may have an Adverse Effect on such resources.

f. The BLM will inform Operator of Eligibility determinations within 20 days of such determination.

4. **Effects and Treatment.** Where Historic Properties have been identified within the APEs, the BLM shall ensure that the following procedures are followed in determining effects on Historic Properties and Traditional Cultural Properties and treatment of direct, indirect, cumulative Adverse Effects, if any.

   a. Determination of Effects

      1. The BLM shall determine the precise nature of the anticipated effects of the Project, or a proposed component of the Project, on Historic Properties within the APE.

      2. If the BLM finds that the Project, or a proposed component of the Project, will not have any effect on Historic Properties, the BLM may issue an ATP in accordance with Stipulation D.6.

      3. If the BLM finds, in consultation with the SHPO, Tribal Governments, and Consulting Parties that the Project, or a proposed component of the Project, may have an effect on Historic Properties, the BLM will then determine whether the effect could be Adverse;

      4. If the BLM finds, in consultation with the SHPO, Tribal Governments, and Consulting Parties that the Project, or a proposed component of the Project, may have an Adverse Effect, the BLM will comply with Stipulation D.4.b.

   b. Avoidance. The BLM, in consultation with the SHPO, Tribal Governments, and Consulting Parties, as appropriate, shall ensure that Operator avoids Adverse Effects to Historic Properties through project design or redesign, relocation of facilities, or by other means in a manner (as specified in Appendix E) consistent with this Agreement or applicable law. If avoidance is not reasonably practicable then treatment will be implemented as specified in Stipulation D.4.c.

   c. Treatment Plans and Other Mitigation. When avoidance is not reasonably practicable, the BLM, in consultation with the SHPO, Operator, Tribal Governments, and Consulting Parties as appropriate, shall review and approve a treatment plan developed and implemented by Operator's Contractor(s). The treatment plan shall be delivered to BLM within 30 days of Operators notification to the Contractor. The treatment plan shall be designed to minimize and/or mitigate project-related effects to Historic Properties. For properties eligible to the NRHP under criteria (a) through (c) (36 CFR 60.4), mitigation, other than data recovery through archaeological excavation, shall be considered (e.g., further documentation, oral history, historic markers, exhibits, interpretive materials, etc.). Mitigation of Historic Properties eligible under criterion (d) may involve archaeological excavation utilizing a Treatment Plan that has been reviewed and approved by the BLM and the SHPO in consultation with Tribes and the public where appropriate. BLM shall use the input from Consulting Parties to inform decisions on mitigation measures. Efforts shall be made to involve the public and/or make interpretive information available to the public.

5. **Monitoring.** Monitoring of Historic Properties and Project activities shall be in accordance with the Monitoring Plan set forth in Appendix D.

6. **Authorizations to Proceed (ATP).** An ATP will be issued by the Tuscarora Field Office BLM Manager to Operator for authorized Project activities that would potentially affect Historic Properties:

   a. For Mining and Exploration Activities. Operator's request for an ATP shall include maps of the areas to be released or authorized (ATP Area) to be provided to the BLM. BLM may issue an ATP within 2 business days once any of the following conditions are met:
      (1) no Historic Properties exist in the ATP Area; or
      (2) Historic Properties at risk of adverse effect due to Project activities within the ATP Area have undergone treatment and the fieldwork summary report have been approved by the BLM and the SHPO in consultation with consulting parties, and BLM has received Operator's letter guaranteeing the funding to complete the remaining post-fieldwork analysis, report and curation, and/or mitigation; or
      (3) the untreated Historic Properties can be monitored and avoided in accordance with Appendix D, (See Appendix A for definition of Avoidance). The default avoidance buffer zone will be at least 30 meters, but BLM may, on a case-by-case basis agree to a smaller avoidance zone.

      BLM will attach to the ATP a list and map of Historic Properties within the ATP Area and whether they must be avoided, or, if archaeological sites, are no longer of archaeological interest as defined in ARPA.

   b. For Exploration. On or before April 15th of each year, Operator will submit to BLM an Annual Exploration Proposal that includes maps of the proposed drill holes and access routes for that year's field season; and will have a Contractor review the map and prepare:
      (1) a list of all existing Class III inventories for the indicated drill holes, if any; and
      (2) a Fieldwork Authorization request for areas not covered by a Class III inventory and areas for which a Class III inventory is older than 10 years.

      Operator shall then submit the map and Cultural Resources review, along with a description of proposed activities (Annual Exploration Proposal), to the BLM for review. Within 10 working days of receipt of the Annual Exploration Proposal, the BLM will review it and notify Operator whether BLM requires more information prior to scheduling site visits. Operator and the BLM will coordinate to schedule site visits in time to begin exploration no later than June 1st. The BLM will supply a file copy of the approved Annual Exploration Proposal to SHPO.

      A BLM archaeologist will perform a site visit with an Operator representative, Operator's Contractor, and a designated Tribal Monitor, following the protocols in Appendix D.

BLM will attach to the ATP a list and map of Historic Properties within the ATP Area and whether they must be avoided, or are no longer, if archaeological sites, of archaeological interest as defined in ARPA.

7. **Records and Curation.** The BLM shall ensure that all records and materials authorized for collection and associated documentation developed as part of an approved Treatment Plan are curated in accordance with 36 CFR 79 in a BLM-approved facility in Nevada and that all materials collected by a Contractor will be maintained in accordance with 36 CFR 79 until the final treatment reports are complete and collections are curated. If materials are collected on private lands, BLM shall ensure that all such material to be returned to their owners will be maintained in accordance with 36 CFR 79 until analysis is complete and the materials are returned. The BLM shall ensure that all such reports conform to contemporary professional standards, the Protocol, and the Department of Interior's Formal Standards for Final Reports of Data Recovery Programs (48 FR 44716-44740).

8. **Discovery Situations.** Within 60 days of the Effective Date, Operator shall provide the BLM with a list of authorized persons empowered to halt activities in a discovery situation and who will be responsible for notifying the BLM of any discoveries. Operator shall notify BLM of any changes to the list as such changes occur, and shall at a minimum provide an updated list once each year when submitting the Annual Exploration Proposal. At least one of these authorized persons will be present during all Operator ground disturbing activities. Cultural Resources, not previously identified, which are discovered while conducting Project activities shall be handled as described in Appendix C (Discovery Plan).

9. **Reporting.** The BLM shall ensure that all final reports resulting from actions pursuant to this Agreement will be provided to the SHPO, Tribal Governments, and Consulting Parties. Final reports will be submitted in both hard (printed) and electronic (digital) copies. Sensitive information shall be redacted in reports provided to Tribal Governments and Consulting Parties unless a data sharing agreement has been approved with the BLM.

10. **Project Operations; Training.**

    a. The requirements under Stipulation D.8 regarding discoveries, and under Stipulation D.6.b regarding exploration drilling protocols, will be included in relevant construction, operations, and exploration plans. Operator will brief all Operator field personnel and any Operator Contractor regarding these requirements.

    b. All personnel (including contractors; new, added, or replaced personnel, etc.) involved in construction, operation, and maintenance of the Project will be instructed (to a degree appropriate to their involvement in the Project) by Operator and its Consultants, on site Avoidance and protection measures, including information on the statutes protecting Cultural Resources and Traditional Cultural Properties as part of its environmental training program prior to being authorized to work in the Project Area. At a minimum, all employees shall receive written information sheet(s) that discuss the importance of Cultural Resources, Traditional Cultural Properties, and archaeological laws including penalties for violation. Operator will be responsible for developing its training program and the BLM and/or the SHPO, at their own option, may provide suggestions to Operator on its content and observe the training program.

11. **Information Sharing and Confidentiality**

a. The BLM shall ensure the security of confidential information provided by Tribes or Consulting Parties.

b. The BLM will provide Operator a copy of locational information for Historic Properties and Traditional Cultural Properties within the APEs, and updates of this information.

c. Operator agrees to maintain the confidentiality of any locational or other Cultural Resource and Traditional Cultural Property information received under this Agreement, and to design procedures to ensure that such information is only made available to personnel with a need to know this information in order to design project facilities or conduct operations in a manner to avoid effects to Historic Properties, Traditional Cultural Properties, or known archeological resources. Operator shall keep such information in a secure location with access limited to necessary Operator representatives. The Cultural Resource and Traditional Cultural Property information obtained by Operator under this Agreement will not be used for any purpose other than consultation with the BLM and the SHPO or conduct of Operator operations in compliance with this Agreement and applicable laws.

d. Precise Historic Property location data will be omitted or redacted from reports and site forms provided to Consulting Parties, with whom the BLM does not have a signed information sharing agreement, pursuant to Section 304 of the NHPA that release of such data could jeopardize Historic Properties.

e. Should the Project or Agreement be terminated, Operator agrees to gather and securely store all confidential information, including electronic files until closure and reclamation is complete and such information is no longer needed, after which Operator shall destroy through shredding or erasure the confidential files and information, and provide written notification to the BLM upon the completion of this task. Operator agrees not to share any such records beyond what is authorized in this Stipulation (D.11) without the written approval of the BLM.

12. **Time Frames**

a. Reports and Treatment Plans. The BLM will review and comment on any report submitted by Operator's Contractor(s) within 30 calendar days of receipt. All reports, plans, and other documentation shall be submitted by the Contractor directly to BLM. Once any reports, plans, or other documentation has been approved by the BLM and the SHPO, the final document shall be shared with Operator. Sensitive information shall be shared according to the provisions of Stipulation D.11.

b. SHPO Consultation. The SHPO shall have 30 calendar days from receipt to review and comment on reports, plans, proposals, or any other documentation forwarded by the BLM, with the exception of discovery situations which shall be handled in accordance with Appendix C.

c. Consultation with Consulting Parties. The BLM shall consult with Tribal Governments, concurrently with SHPO consultation, about TCPs, Historic Properties, and other concerns potentially affected by the Project. Consultation with Tribal Governments shall be on-going. Additional consultation will take place during Section 106 evaluation, regarding specific alternatives in the Project EIS, as part of monitoring and discovery situations, and for development and implementation of treatment plans. Tribes shall have 30 calendar days from receipt to review and comment on any documentation.

The BLM shall provide Signatories with copies of any comments received during Tribal Consultation with the exception of sensitive or confidential information obtained from Tribal Consultation. The SHPO shall have 10 working days to review the comments.

d. Failure to Meet Timelines. If any Consulting Party to this Agreement fails to respond to the BLM within 30 calendar days of receipt of a submission, the BLM shall presume concurrence with the BLM's findings as detailed in the submission and proceed accordingly.

e. Reports. Operator's Contractor shall submit a draft report of any inventory, evaluation, monitoring, treatment, or other mitigation activities to the BLM within three months after the completion of the fieldwork, unless otherwise agreed. Revised reports will be due 60 calendar days after receiving any BLM comments.

f. Curation. All records, data files, photographs, negatives, maps, field notes, artifacts, catalogs, samples, and reports and other materials collected or developed for any identification, evaluation or treatment activities will be curated in a facility in Nevada approved by the BLM. Operator or their Contractor shall provide proof of curation to the BLM from the curatorial facilities within two weeks of BLM's acceptance of the final report.

E. NATIVE AMERICAN CONSULTATION

1. BLM will continue to consult about this Project with the Indian Tribes and interested parties that it has identified as attaching religious or cultural significance to areas within or near the APEs .

2. The BLM will continue to formally consult with Tribal Governments in accordance with Executive Order 13175 on consultation and Coordination with Indian Tribal Governments, dated November 6, 2000, (65 FR 67249), Memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" 959 FR 22951), and the National Historic Preservation Act (1966, as Amended). Consultation on identification, evaluation, and treatment efforts will be consistent with the BLM Manual 8160 and the BLM Handbook 8160-1, or in accordance with specific agreements with specific Tribes on the conduct of consultation, if any.

3. Information gathered through consultation considered confidential or proprietary by a Tribe or Western Shoshone individuals may be held confidential to the extent allowed by federal law and Stipulation D.11 above.

F. DISPUTE RESOLUTION

1. Should any Signatory or Invited Signatory object, in writing, at any time to any actions proposed or the manner in which the terms of this Agreement are implemented, the BLM shall consult for up to 45 days with the objecting party to resolve the concern. If the BLM determines that the concern cannot be resolved, the BLM shall:

    a. Forward all documentation relevant to the dispute, including the BLM's proposed resolution, to the ACHP. The ACHP shall provide the BLM with its advice on the resolution of the concern within 30 days of receiving adequate documentation. Prior to reaching its final decision on the dispute, the BLM shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, and Invited and other Signatories; and provide them with a copy of this written response. The BLM will then proceed according to its final decision.

    b. If the ACHP does not provide its advice regarding the dispute within the 30 day time period, the BLM may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the BLM shall prepare a written response that takes into account any timely comments regarding the dispute from the Signatories to this Agreement, and provide them and the ACHP with a copy of such written response.

    c. The State Director of the BLM in Nevada will have the authority to make a final determination for any objection that cannot be resolved after taking any comments from the ACHP into account.

    d. Objections raised by a Tribe or interested person that has not participated in Consultation or in this Agreement as a Consulting Party or interested party shall be handled pursuant to the provisions of 36 CFR 800.4(d)(1)(ii) and 800.5(c)(2)(i).

    e. The Signatory and Invited Parties shall continue all actions under this Agreement that are not the subject of the dispute.

2. Should the SHPO and BLM disagree regarding eligibility, the BLM shall seek a formal determination of eligibility from the Keeper of the National Register in accordance with 36 CFR 63.2. The Keeper's determination will be final.

3. Nothing in this Agreement shall waive or otherwise limit any of the Parties' administrative or judicial remedy or right of review available under applicable law or regulations.

G. AMENDMENT

Any Signatory or Invited Signatory to this Agreement may request that this Agreement be amended, whereupon the Signatories and Invited Signatory will consult to consider such amendment. The amendment will be effective on the date a copy signed by all of the Signatories and Invited Signatory is filed with the ACHP.

H. AGREEMENT REPORTING

BLM shall invite Consulting Parties, Signatories, and the Invited Signatories to discuss, at least once a year, the accomplishments, effectiveness, monitoring results, and implementation of the Agreement. The

consultation shall be documented in an Annual Agreement Report prepared by the BLM and shared with Consulting Parties, and may result in Amendment (under Stipulation G).

I. TERM AND TERMINATION

This Agreement shall become effective on the Effective Date, and shall remain in effect for a period of ten years, or until its earlier termination as provided below. If the Project has not been initiated within five years of the Effective Date, this Agreement will automatically terminate.

Any Signatory Party or Invited Signatory to the Agreement may terminate this Agreement by providing 30 calendar days notice to the other Parties, provided that the Parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. If attempts to resolve differences or amend the Agreement fail, the Agreement can be terminated.

In the event that this Agreement is terminated, the BLM will comply with the provisions of the current Protocol and applicable NHPA regulations.

J. NATURE OF OPERATOR CONTRACTUAL OBLIGATIONS.

The contractual obligations of Operator created by this Agreement are enforceable only by the BLM against Operator. This Agreement creates no contractual right or obligation between Operator and any other person or entity, including any other Signatory (other than the BLM), or any Concurring or Consulting Parties, Tribe, or member of the public. Nothing herein shall limit any person's or entity's rights, if any, under the NHPA or the Administrative Procedure Act.

K. TERMINATION OF IVANHOE MOA.

The BLM, the ACHP and the SHPO hereby terminate the Ivanhoe MOA.

EXECUTION and implementation of this Agreement is evidence that the BLM has complied with Section 106 of the NHPA and afforded the ACHP the opportunity to comment on this Project and its effects on Historic Properties, and that the BLM is taking into account the effects of the Project on Historic Properties.

[SIGNATURES APPEAR ON FOLLOWING PAGES]

SIGNATORY PARTIES:

BUREAU OF LAND MANAGEMENT, TUSCARORA FIELD OFFICE MANAGER

By: _____ Date: _____
Richard E. Adams, Field Office Manager

NEVADA STATE HISTORIC PRESERVATION OFFICE

By: _____ Date: _____
Rebecca Palmer, Acting State Historic Preservation Officer

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: _____ Date: _____
John M. Fowler, Executive Director

INVITED SIGNATORY PARTY:

RODEO CREEK GOLD, INC.

By: _____ Date: _____

Title: _____

CONCURRING PARTIES:

TE-MOAK TRIBE OF WESTERN SHOSHONE INDIANS

By: _____ Date: _____

Title: _____

BATTLE MOUNTAIN BAND

By: _____ Date: _____

Title: _____

SOUTH FORK BAND

By: _____ Date: _____

Title: _____

ELKO BAND

By: _____ Date: _____

Title: _____

WELLS BAND

By: _____ Date: _____

Title: _____

SHOSHONE-PAIUTE TRIBES OF THE DUCK VALLEY INDIAN RESERVATION

By: _____ Date: _____

Title: _____

ELY SHOSHONE TRIBE

By: _____ Date: _____

Title: _____

YOMBA SHOSHONE TRIBE

By: _____ Date: _____

Title: _____

CONFEDERATE TRIBES OF THE GOSHUTE INDIAN RESERVATION

By: _____ Date: _____

Title: _____

DUCKWATER SHOSHONE TRIBE

By: _____ Date: _____

Title: _____

YOMBA SHOSHONE TRIBE

By: _____ Date: _____

Title: _____

APPENDIX A: DEFINITIONS

Adverse Effect – when an activity or undertaking alters, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Defined at 35 C.F.R. § 800.5(1).

Annual Exploration Proposal – Annual plan for proposed mineral exploration to be submitted by the specified dates along with maps showing the locations of proposed drill sites and access routes, and including information about any existing Cultural Resources inventories and known Cultural Resources, and fieldwork authorization prepared by the Contractor(s). The proposal shall then be reviewed by BLM, and an ATP issued upon compliance with the Stipulations. BLM will provide SHPO with a copy of this document for their records.

Areas of Potential Effects (APEs) – The total geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of Historic Properties, if any such properties exist (36 CFR 800.16 (d)). The APEs for this Agreement are defined in Stipulation B, and depicted in Appendix B. APEs for surface mineral exploration within the larger APE will be designated each year in accordance with Stipulation D.6.b.

Avoidance – No project-related disturbances or activities occurring within a designated buffer zone around the outer perimeter of any Historic Property or locus within the District. The default avoidance buffer zone is at least 30 meters, but BLM may, on a case-by-case basis agree to a smaller avoidance zone.

Class III Inventory – An intensive, on-the-ground pedestrian survey intended to locate all Historic Properties within a specified area. An intensive survey describes the distribution of Historic Properties in an area; determines the number, location and condition of Historic Properties; determines the types of Historic Properties actually present within the area; and records the physical extent of specific properties (BLM Manual 8110; and Protocol).

Concurring Party – A party who signs this Agreement but is not legally or financially responsible for completion of the Stipulations. Concurring Parties may volunteer to assist with implementation of stipulations; however, they cannot terminate the Agreement.

Consulting Parties – Organizations or individuals likely to be interested in the Project and who have requested that they be consulted about Cultural Resources that would be affected by the Project.

Contractor – Persons meeting qualifications set forth in the Secretary of Interior's Professional Qualifications Standards (36 CFR 61) and who have a current permit for such work issued by the BLM in Nevada. Contractors include professional Cultural Resource consultants (archaeologists, historians, ethnographers, architects, or anthropologists) appropriate for the type of work being performed, including survey, mitigation, and monitoring. They are responsible for preparing or technically reviewing reports, records, and professional literature.

Cultural Resource – An object or definite location of human activity, occupation, use, or significance identifiable through field inventory, historical documentation, or oral evidence. Cultural resources are prehistoric, historic, archaeological, or architectural sites, structures, buildings, places, or objects and locations of traditional cultural or religious importance to specified social and/or culture groups. Cultural resources include the entire spectrum of objects and places, from artifacts to cultural landscapes, without regard to eligibility for inclusion on the NRHP. They are places and objects of archaeological interest as defined in ARPA.

Discovery – See Appendix C

District – see Historic Properties.

Eligibility – the eligibility of Cultural Resources to the NRHP (utilizing criteria found in 36 CFR 60.4).

Government-to-Government – for the purposes of this Agreement, the unique relationship that exists between the federal government and tribal governments that is respectful of tribal sovereignty, and sensitive to the concerns and needs of the Indian tribe.

Historic Properties – Cultural Resources that are included in, or eligible for inclusion in, the NRHP and may include any prehistoric or historic district, site, building, structure, TCP or object. This term includes artifacts, records, and remains that are related to and located within such properties. TCPs are properties of traditional religious and cultural importance to a Tribe that meet the NRHP criteria. The term "eligible for inclusion in the NRHP" refers both to properties formally determined as such in accordance with regulations of the Secretary of the Interior and all other properties that meet the NRHP criteria. The Tosawihi Quarries Archaeological District (*District*) is eligible to the NRHP under criteria (a) and (d). Loci within the District have been determined by BLM and SHPO to contribute to this historic property. Defined at 36 C.F.R. § 800.16(l)(1).

Linear Sites – Historic properties or archaeological sites that include such sites types as historic roads, railroads, canals, and ditches.

Loci, Locus – Archaeological sites within the District are referred to as loci (locus = singular). A locus has greater than 10 artifacts per square meter and contributes to the eligibility of the entire District to the NRHP. Loci boundaries are defined by lower artifact densities or disturbances. In some instances site and loci boundaries abut adjacent sites and loci, but usually sites or loci are separated by more than 30 meters.

Operator: "…means a person conducting or proposing to conduct operations." 43 CFR II §3809.5 (10-1-06 Edition).

Project – Activities covered within the Hollister Underground Mine Project proposed plan of operations (PoO), consisting of (1) developing the currently permitted underground bulk sampling and underground exploration project into a full scale underground mine and continuing surface exploration, and (2) combining certain notice-level surface exploration activities.

Protocol – The most current signed State Protocol Agreement between the BLM and SHPO, and any associated guidelines and stipulations.

Signatory Parties – For this Agreement means the BLM, the SHPO, and the ACHP. Operator is an Invited Signatory to this Agreement.

Traditional Cultural Properties (TCP) – are eligible for inclusion in the NRHP because of their association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community. For this Agreement "TCP" includes the "Tosawihi" complex of four distinct locations within the Exploration APE.

Traditional Cultural Significance – significance derived from the role the item(s), or place plays in a community's historically rooted beliefs, customs, and practices, including but not limited to: a location associated with the traditional beliefs; a location where traditional ceremonial activities are performed; a location where a community carries out economic, artistic, or other cultural practices that maintain historic identity; etc.

Treatment Plan – Provides a proposal for the mitigation of effects upon any historic property that a project would affect. It can include data recovery, documentation, restoration, or other measures.

Tribal Monitor – Individual tribal members designated by Tribal Governments (Section E.1.) in accordance with Appendix D, who, following the appropriate BLM Elko District Office Monitor Protocol, aid the Contractor(s) in the monitoring of historic properties and TCPs within the APEs for damage and/or disturbance and archaeological site treatment activities.

Tribes – The federally recognized Tribes. For this Project the federally recognized Tribes who indicate that they have an interest in this area include those identified as Western Shoshone.

APPENDIX B: AREAS OF POTENTIAL EFFECTS

The APEs involve lands administrated by the BLM in Elko County, Nevada. The APEs were defined by the BLM, in consultation with SHPO, to include all lands that may be directly or indirectly affected by the Project. The BLM, in consultation with the SHPO, the ACHP, Tribal Governments, Consulting Parties and Operator, may amend the APEs as needed through an amendment to this Agreement.

Attached are two maps depicting the two APEs:

1. Mining APE includes the areas to be directly or indirectly affected during the development, operation, closure, and reclamation of the Hollister underground mine.

2. Exploration APE includes areas where Operator may propose surface exploration activities as specified in an Annual Exploration Proposal and a request for an ATP. The ATP Area will be within the larger Exploration APE. The Exploration APE will exclude all Traditional Cultural Properties (TCP) including a 250 foot buffer around the TCP exterior boundary.

Midas-Tuscarora Road

APE along Ivanhoe Road extends to intersection with Tuscarora Midas Road

Ivanhoe Road

78-foot-wide buffer along road.

Proposed Mine Office Complex

West Pit

Alternative Waste Rock Storage Facility

East Pit Facilities

Proposed NPDES Surface Discharge

Mud Springs Road

Coyote Creek Substation

Little Antelope Creek Road and Buried RIB Pipeline

Proposed 24.9-kV Transmission Line

Existing 345-kV Transmission Line

328-foot-wide buffer along transmission lines.

Existing 120-kV Transmission Line

East RIB

West RIBs (2)

Antelope Creek Road

Proposed Rodeo Creek Substation

Proposed 120-kV Transmission Line

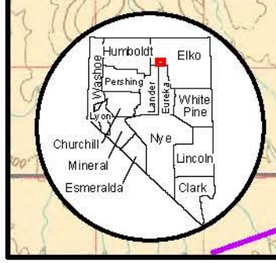
T37N, R48E T38N, R49E

T37N, R48E T37N, R49E

T 37 N R 47 E

T 36 N R 47 E

T 36 N R 49 E



Legend

Existing/Authorized Disturbance or Facilities

- Rapid Infiltration Basin (RIB)
- Water Well
- Escapeway Raise
- Road
- 345-kV Transmission Line
- 120-kV Transmission Line

Proposed Disturbance or Facilities

- Project Area Boundary
- Mine Office Complex
- NPDES Surface Discharge
- Hatter Production Shaft
- 24.9-kV Transmission Line
- 120-kV Transmission Line
- APE for Mining Activities and Facilities
- APE for Exploration Activities
- Stormwater Diversion Channel

Alternative to Proposed Action

- Mud Springs Waste Rock Storage Facility

Land Ownership

- Private
- Bureau of Land Management

Sources: RCG 2009; BLM 2010.

N

0 0.8 1.6 Miles

Hollister Underground Mine Project EIS

Cultural Resources
Area of Potential Effect

02/17/2011

Antelope Spring

Creek

Ivanhoe Road

West Raise

East Raise

Proposed NPDES Surface Discharge

Proposed Mine Office Complex

West Pit

Stormwater Diversion Channel

East Pit Facilities

Hatter Production Shaft

Alternative Waste Rock Storage Facility

Mud Springs Road

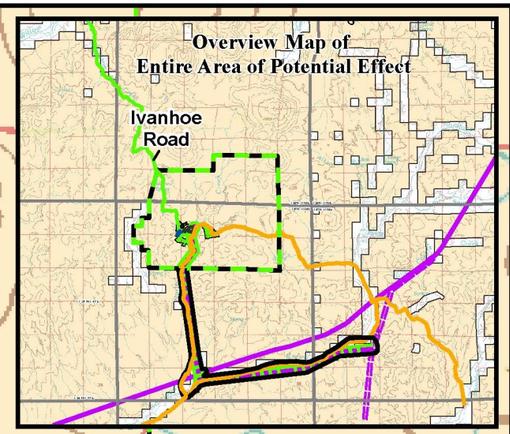
Little Antelope Creek Road

1800

1750

Mud Spring

1



Legend

Existing/Authorized Disturbance or Facilities

- Rapid Infiltration Basin (RIB)
- Water Well
- Escapeway Raise
- Road
- 345-kV Transmission Line
- 120-kV Transmission Line

Proposed Disturbance or Facilities

- Project Area Boundary
- Mine Office Complex
- NPDES Surface Discharge
- Hatter Production Shaft
- 24.9-kV Transmission Line
- 120-kV Transmission Line
- APE for Mining Activities and Facilities
- APE for Exploration Activities
- Stormwater Diversion Channel

Alternative to Proposed Action

- Mud Springs Waste Rock Storage Facility

Land Ownership

- Private
- Bureau of Land Management

Sources: RCG 2009; BLM 2010.

N

0 3 6 Miles

1:24,000

Hollister Underground Mine Project EIS

Cultural Resources
Area of Potential Effect

04/05/2013

APPENDIX C: DISCOVERY PLAN

A. Unanticipated Discovery of Cultural Resources

1. Cease Work and Notify BLM. If a previously unidentified Cultural Resource is discovered, all mine-related activities within 100 feet of the discovery (Avoidance Boundary) will cease immediately and Operator or its authorized representative shall secure the location to prevent vandalism or other damage. Operator or its authorized representative shall notify the BLM Manager of the discovery by telephone within 24 hours, followed by written confirmation (Discovery Notice). Within 48 hours of delivery of the Discovery Notice, a BLM Authorized Officer will visit the discovery site to determine whether proceeding with activities within the Avoidance Boundary will harm the discovered Cultural Resource or whether the Avoidance Boundary may be safely reduced to allow activity outside of a reduced Avoidance Boundary without harm to the discovered Cultural Resource. Any activity within the Avoidance Boundary shall remain suspended until after the discovery has been evaluated, any necessary mitigation measures completed, and the BLM Manager has issued a written or emailed ATP.

2. SHPO Notice. Within 48 hours of delivery of the Discovery Notice, the BLM shall notify the SHPO of the discovery (SHPO Notice). The SHPO shall give its comments to the BLM within 2 working days of receipt of the SHPO Notice. If the BLM has not received the SHPO comments within 2 working days of the SHPO Notice, the BLM shall presume the SHPO concurrence with any BLM recommendation in the SHPO Notice or that the SHPO has declined to participate in consultation regarding the discovery, and the BLM may then make any decision regarding the discovery without further SHPO consultation.

3. BLM Decision. Within 4 working days of the delivery of the SHPO Notice, or 6 working days of delivery of the Discovery Notice, whichever comes first, the BLM shall notify Operator of the BLM's decision whether to (i) allow mining related activities to proceed without mitigation, (ii) require mitigation of the discovery; or (iii) allow mining related activities to proceed during mitigation of the discovery (Mitigation Decision Notice).

4. Consultation with SHPO. The BLM shall have 7 working days from delivery of a Mitigation Decision Notice requiring mitigation to consult with Operator and the SHPO and decide the nature and extent of mitigating measures required. The BLM shall notify Operator and the SHPO of the BLM's decision regarding mitigation within 10 days of delivery of a Mitigation Decision Notice and will ensure that any required mitigating measures are implemented.

B. Unanticipated Discovery of Human Remains or Items of Cultural Patrimony

1. On Federal Land. Human remains and associated artifacts may be discovered during Project development or archaeological excavations. BLM shall ensure that any such items are treated with due respect. Discovery of such items will be handled as follows:

    a. Discovery Notification. If human remains, remains thought to be human, associated or unassociated funerary objects, or objects of cultural patrimony are discovered, work within 100 feet of the discovery would stop immediately. Oral notification of the discovery shall be made to the BLM and the SHPO by Operator or its contractors immediately, followed by written notification. Upon notification, the BLM would notify the appropriate law enforcement authorities, the county coroner, and appropriate tribes and potentially interested parties. If the remains are determined to not be of forensic importance, an assessment of the remains would be made.

b. Assessment of the Remains. An in-situ assessment of the remains would be made to determine the cultural affiliation of the remains to aid in determining required actions. The BLM would meet all requirements of Native American Graves Protection and Repatriation Act, Pub. L. 101-601, 25 U.S.C. 3001 et seq., 104 Stat. 3048 (NAGPRA) for all discoveries of human remains and associated objects in accordance with 43 CFR 10 and BLM IM 2007-002, which allows for reburial of human remains and associated funerary objects excavated on BLM administered land. All reasonable measures would be taken by the involved parties to resolve issues regarding affiliation and disposition of human remains within 30 days as required by law.

c. Protection of Human Remains. Operator shall maintain the Avoidance Boundaries described above. Such resources discovered on federal lands by Operator will be secured by Operator for up to 48 hours by which time BLM shall secure the area or take custody of such resources.

d. Resumption of Work. Work in the immediate vicinity of the human remains may not resume until after the disposition of the human remains is determined. BLM would issue an ATP after notification to SHPO and consultation with appropriate Tribal representatives.

2. On Private Lands. Human remains and associated funerary objects found on private or state lands will be handled according to the provisions of applicable Nevada law (NRS 383). Operator shall notify the relevant county coroner or sheriff, the land owner, the SHPO, and the BLM of any such discovery.

APPENDIX D: MONITORING PLAN

This Monitoring and Avoidance Plan is designed to monitor and document changes to Historic Properties (both archaeological and TCPs) that may result from the Project. Implementation of this plan will allow the BLM to identify, evaluate, document, and monitor, direct, indirect, and cumulative impacts to Historic Properties within the APE. While this Plan is meant to be inclusive during the life of the Project (from exploration through the completion of reclamation activities), unforeseen situations and concerns on the part of the BLM may necessitate changes to this Monitoring Plan. The Monitoring Plan provides for the involvement of Tribal Monitors to accompany Contractor(s) during fieldwork, and provides for annual monitoring of selected Historic Properties. In-place monitoring will be required during mineral exploration and mining activities at any avoided Historic Properties. Monitoring may result in unanticipated discoveries that will be handled following the protocol in Appendix C.

A. Tribal Monitors

BLM will request that Tribal Governments of interest (Te-Moak Tribe of Western Shoshone Indians, the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation, the Ely Shoshone Tribe, the Yomba Shoshone Tribe, the Confederated Tribes of the Goshute Reservation, the Western Shoshone Committee of Duck Valley, and the Duckwater Shoshone Tribe) provide a list of possible monitors designated by them to participate in Project monitoring. The BLM will provide for the Tribal Governments copies of the BLM Elko District Office Monitor Protocol to be used by the Tribal Monitor(s). The Tribal Monitor(s) will coordinate their work with the designated Contractor(s) and the designated BLM representative.

Once Operator's Contractor receives a Fieldwork Authorization (FWA) from the BLM, the BLM shall contact the individuals on the Tribal Monitor list to arrange for their participation in the fieldwork. So long as notification of potential Tribal Monitors is attempted, fieldwork shall not be delayed based on a lack of response or unavailability of Tribal Monitors.

For safety purposes, Tribal Monitors shall receive an appropriate level of MSHA training prior to project implementation. To meet the needs of monitoring of all activities, Tribal Monitors will adhere to the guidelines and protocols provided by the BLM. While the designated Tribal Monitors do not have the authority to halt construction activities, if during construction the Tribal Monitors note that an activity may impact a resource of importance to the Western Shoshone, the Tribal Monitors shall inform the Contractor and the designated BLM representative, who will inform Operator about the concern and attempt to resolve the issue. Tribal Monitor authority will include activities associated with actions of liaison between the tribal communities, the Contractor(s), and the BLM.

B. Site Monitoring

MONITORING SITE SELECTION

Monitoring will be comprised of three (3) parts:

1. Mining/Exploration Direct Effects Monitoring:
   - during construction of the transmission and distribution lines, the Contractor(s) and Tribal Monitor(s) would monitor eligible historic properties within and immediately adjacent to (within 250 feet) the construction area limits/corridors
   - Operator will use commercially-reasonable efforts to obtain landowner permission to monitor sites on Private Lands within the NV Energy transmission line corridor.

- after construction of new facilities, through the completion of reclamation activities, an archaeologist would conduct an annual visits to no more than three (3) BLM defined historic properties and/or TCP locations in each of the following areas
    - along the Ivanhoe Road
    - along the Little Antelope Creek Road to the Rapid Infiltration Basins
    - along the NV Energy transmission line
        - Operator will use commercially-reasonable efforts to obtain landowner permission to monitor sites on Private Lands within the NV Energy transmission line corridor.
    - a site near the new office facility
    - a site near the Hatter Production Shaft
- Exploration sites defined within 250 feet of known historic properties and TCPs will be established with the aid of the BLM archaeologist. These locations will be monitored at the completion of exploration (including reclamation) activities

2. "Control" Sites to Monitor Cumulative Effects
    - BLM (in collaboration with Consulting Parties) will select up to five (5) historic properties in outlying areas of the exploration APE to be monitored annually through the completion of reclamation activities
    - BLM (in collaboration with Consulting Parties) will select up to five (5) locations within the TCP to be monitored annually through the completion of reclamation activities
3. Indirect Effects Monitoring
    - BLM (in collaboration with Consulting Parties) will create a travel (driving or "windshield survey") route through the TCPs and Historic District to allow Contractors and Tribal Monitors to identify potential areas affected.
    - Areas identified as affected will be documented (including effects, cause if known, impact to overall integrity and eligibility status of the property, etc.)

To assure consistency of data gathering and utilization the following will be required:

a. Baseline data will be acquired for Historic Properties and TCPs to be monitored annually utilizing existing documents (Cultural Resource or site forms and their associated reports, maps, and photographs).
b. An initial baseline assessment will be made for each Historic Property and TCP to be monitored. The intent is to enable a comparison of baseline and collected data through the completion of the mine's reclamation activities to measure any changes.
c. Photo points will be created and utilized at all sites that are monitored
d. Upon completion of the Project, all Historic Properties that were monitored and remain untreated over the LOP will be revisited and a final integrity assessment will be made. Additional mitigation for Project impacts may be required by the BLM.
e. Contractors and Tribal Monitors will use data gathering tools provided by the BLM
f. Detailed monitoring reports in the form of a letter, field notes, and recommendations will be provided to the BLM no later than one month after end of each annual monitoring cycle. Within 30 days of acceptance, the reports shall be shared with other Signatory and Consulting Parties. A Management Summary included in each report shall be made available to the public, while also ensuring compliance with Stipulation D.11.
g. A final LOP report will be completed which summarizes the entire monitoring program and includes a final integrity assessment of Historic Properties monitored throughout the LOP.

APPENDIX E: OPERATOR EXPLORATION

CULTURAL RESOURCE AVOIDANCE PROTOCOL

The procedures outlined below are designed for Operator use in planning, obtaining BLM authorizations and compliance with permit stipulations for surface mineral exploration. This process must be completed and written documentation signed by Operator's person-in-charge of exploration prior to any additional surface exploration.

A. Procedure in Areas Covered by Class III Surveys:

1) Proposed drill holes are outlined on a map by the Operator Project Manager in collaboration with the Operator Drill Services coordinator.

2) The Drill Services coordinator assigns a Drill Services technician or survey crew to stake drill locations and proposed access routes included in an annual exploration season. The proposed drill locations and access routes are marked with **red flagging** to indicate that they have not yet undergone BLM approval. Construction conditions are taken into consideration during this non-surface disturbing survey to insure the least amount of disturbance and optimal equipment access.

3) Five days prior to the BLM field review for an annual exploration season, BLM will contact individuals on the Tribe-designated monitor list (to be developed as indicated in Section A of Appendix D) to schedule an monitor to attend the field review. If no monitor is available or if a scheduled monitor fails to attend, BLM will proceed with the field review without a Tribal Monitor.

4) The flagged access routes and drill locations are field-inspected by Operator's Project Manager, Drill Services representative, the Environmental Representative, and a BLM archaeologist or other BLM-designated representative, and Tribal Monitor, if available, to ensure that the proposed disturbance is properly located and that all identified eligible loci or Historic Properties are avoided by at least 30 meters, unless a smaller Avoidance buffer zone is approved by the BLM on a case-by-case basis.

5) The BLM representative and the Drill Services representative shall confirm the width and length of the drill location, and the access route. After BLM has approved a specific drill location and access route, Operator will change the red flagging to **green flagging** indicating that the drill location and access has been approved by BLM.

6) If the authorized drill location or access route is within 100 meters /300 feet of any known loci or Historic Property, the Avoidance zone must be clearly marked with **blue flagging** signaling a no-disturbance area. Operator shall ensure that flagging remains in place at the BLM designated locations throughout drilling activities at each drill location.

7) While Tribal Monitors do not have the authority to halt construction activities, if during construction the monitor notes that an activity may impact a resource of importance to the Western Shoshone, Operator's on-site representative must contact the Project Manager, who will consult with the Operator Environmental Department and the BLM before proceeding.

8) At the conclusion of activities (including reclamation), the BLM will perform a field review to confirm compliance with the Avoidance stipulations and remove the **blue flagging** used to mark

any Avoidance zones around known Historic Properties or Loci will be removed. Operator may not begin reclamation of any drill site location until site-specific reclamation plans have been approved by BLM.

B. Procedure in Areas that have not been Class III surveyed for Cultural Resources:

1) The Operator Project Manager delineates proposed drill locations on a map, taking into account topography to ensure minimal surface disturbance, and reviews the map with a Operator Drill Services coordinator.

2) The Drill Services coordinator assigns a Drill Services technician or survey crew to stake and flag the proposed drill locations and access routes. Proposed drill locations and access routes are marked with **red flagging** to indicate that they remain unauthorized. The Project Manager and a Drill Services representative must field-check the proposed access routes to ensure that they meet project requirements.

3) Upon completion of flagging, the Operator Environmental Manager will arrange for a Contractor to conduct a Class III inventory of the proposed exploration area. The Contractor obtains a Fieldwork Authorization from BLM. BLM shall notify potential Tribal Monitors of the date(s) when fieldwork shall be completed and make arrangements for their participation. If no monitor is available or there is no response, then upon BLM approval fieldwork can proceed without a Tribal Monitor. A BLM archaeologist shall also review the findings of any inventory in the field with the Contractor and the Environmental Manager.

4) If the BLM archeologist determines in the course of the Class III inventory that potential Historic Properties may be impacted, or in consultation with the Tribal Governments determines a potential TCP may be impacted, then Operator, in consultation with BLM and in conjunction with the Drill Services coordinator shall move the proposed drill location or access road to avoid such properties.

5) After the fieldwork, the Contractor will submit an inventory report (including recommendations of Tribal Monitors) to the BLM. Once accepted by the BLM and the SHPO, a copy of this report will be provided to Operator.

6) The drill plan will then be submitted to the BLM for approval. BLM will determine whether or not Avoidance is necessary to protect Historic Properties.

7) Five days prior to BLM field review of drill locations, BLM will contact individuals on the Tribe-designated monitor list to schedule an monitor to attend the field review. If no monitor is available or if a scheduled monitor fails to attend, BLM will proceed with the field review without a Tribal Monitor.

8) The BLM authorized access routes and drill locations are field-inspected by the Project Manager, a Drill Services representative, an Environmental Department representative, and a BLM representative, and Tribal Monitor, if any, to ensure that the proposed disturbance is properly located and that all Historic Properties or loci are avoided as required by the BLM.

9) The BLM representative and the Drill Services representative shall confirm the width and length of the drill location and access route. After BLM has approved the specific drill location and access route, Operator will change the red flagging to **green flagging** indicating that the drill

location and access route has been approved. Operator will ensure that flagging remains in place at the BLM-approved locations during exploration.

10) If the authorized construction is within 100 meters/30 feet of a Historic Property or locus the BLM and Operator representative shall mark the Avoidance/exclusion zone with **blue flagging** signaling a no-disturbance area. The BLM may require Contractor(s) and Tribal Monitors to be present during exploration where Historic Properties or Loci must be avoided.

11) While Tribal Monitors do not have the authority to halt construction activities, if during construction the Tribal Monitors note that an activity may impact a resource of importance to the Western Shoshone, Operator's on-site representative must contact the Project Manager, who will consult with the Operator Environmental Department and the BLM before proceeding.

12) At the conclusion of activities (including reclamation), BLM will perform a field review to confirm compliance with the Avoidance stipulations and remove the **blue flagging** used to mark any avoidance zones. Operator may not begin reclamation of any drill location until site-specific reclamation plans have been approved by BLM.

Everyone involved in mineral exploration shall be reminded that if there is any doubt or uncertainty about the Avoidance/exclusion zone near a proposed disturbance, that no disturbance should be initiated until the status is confirmed with the Project Manager or the Environmental Representative, Contractor, and the BLM archaeologist.

Appendix B

Native American Tribes Public Meeting Summary Notes

Hollister Underground Mine Project
Draft Environmental Impact Statement (DEIS)
Public Meeting Summary
July 11, 2012
2:00 – 5:00 PM MT
Human Development Center, Owyhee, Nevada

Project Participants:

BLM:
Janice Stadelman
Deb McFarlane
Dave Overcast
Victoria Anne

Rodeo Creek Gold (RCG):
Teresa Conner
Doug Crawford

AECOM:
Scott Duncan
Anne Doud

Davis, Graham, and Stubbs:
Janette Ferguson

Introduction:
Dave Overcast
Mr. Dave Overcast (Tuscarora Field Office Manager) began the meeting by asking the project participants (listed above) to introduce themselves. He also reviewed the National Environmental Policy Act (NEPA) process and relative schedule for the Hollister Underground Mine Project Environmental Impact Statement (EIS) and defined where the Hollister Project is currently and what the next steps will be. Mr. Overcast clarified that there is a 30-day review period after the Final EIS is published. Mr. Overcast explained that the BLM is now collecting comments on the Draft EIS (DEIS). The comment period ends July 16th, and the BLM welcomes comments from all interested parties but needs them postmarked by July 16th.

The Shoshone-Paiute Tribes of the Duck Valley Indian Reservation, Tribal Chairman Terry Gibson, stated that he would like to have government-to-government meetings for the Tribes to give input to the Hollister Project EIS process. Mr. Overcast agreed and stated that if the Tribes would like to provide Ken Miller (BLM Elko District Manager) or himself a date for the meeting, then the BLM would schedule the date and organize a meeting for government-to-government consultation to occur.

Chairman Terry Gibson asked when the BLM plans to issue the decision on this project. Ms. Stadelman stated that the BLM tentatively hopes to issue a decision by the end of the calendar year. The process depends on what the comments are that the BLM has to respond to. The comment period for the DEIS ends at close of business on July 16, 2012. To date, the BLM has not received comments for the project, but people wait to the last moment to submit comments.

Chairman Terry Gibson and Mr. Overcast clearly stated for the people/participants that this meeting was a public meeting for the NEPA process; it is not a government-to-government consultation meeting.

Chairman Terry Gibson asked if the BLM was recording this "hearing". The BLM representatives, Rodeo Creek Gold (RCG) representatives, and AECOM (consulting firm writing EIS) representatives stated the public meeting was not being recorded. Instead it was pointed out which people (AECOM representatives, the BLM representatives, and RCG representatives) would be taking notes at this "public meeting".

Teresa Conner

Ms. Teresa Conner summarized the Proposed Action for the Hollister Project EIS. She explained that the project would entail the following:

- Continued exploration (surface and underground);
- Bulk sampling and underground exploration would be transitioned to full-scale production of gold and silver mining (underground mining operation);
- Construction of a production shaft, ramp, or raise on existing disturbance;
- Continued maintenance on Little Antelope Creek and the Ivanhoe Road;
- Construction of 11.6 miles of electric power transmission line (120 kV transmission line paralleling Antelope Creek and a 24.9 kV transmission line paralleling Little Antelope Creek. Rodeo Creek Gold would own the substations;
- Acquisition of a National Pollutant Discharge Elimination System (NPDES) permit to discharge water pumped from underground to the surface to flow into Little Antelope Creek;
- Waste rock would be placed in the existing waste rock storage facility (WRSF) or in a new facility located in the West Pit;
- Ancillary support facilities such as a new office and maintenance shops that would be constructed on previously disturbed areas and removed from their current East Pit location;
- No mill, leach pad, or processing facilities would be constructed on the Hollister site. All ore would be processed off-site.

Janice Stadelman

Ms. Janice Stadelman summarized the Alternatives to the Proposed Action:

1. The Mud Springs Waste Rock Facility Alternative – a new waste rock storage facility (WRSF) could be constructed on undisturbed land located east of the existing reclaimed heap leach pad.
2. The Mud Springs Road Transmission Line Alternative – a newly constructed transmission line could be located along Mud Springs Road to the Hollister Underground Mine from the Coyote Substation located near the Rossi Mine.
3. The Backfill Alternative - all shafts and portals could be backfilled after mine closure.

Ms. Stadelman stated the BLM-preferred alternative at this time is the Proposed Action and Backfill Alternative combined. Ms. Stadelman presented the posters describing the Proposed Action and alternatives as well as some of the key resources analyzed: Native American Traditional Values/Cultural Resources Study Area, Surface Water Potential Impacts due to Groundwater Pumping; and Sage-Grouse Special Designation Areas. The figures for these resources were chosen due to issues usually surrounding these topics.

MS. Stadelman also stated the BLM brought copies of the DEIS for reference to discuss other figures and if needed to answer questions. The BLM also brought some extra copies both in paper and digital format if people needed copies.

Terry Gibson, Tribal Chairman for the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation

Chairman Terry Gibson said that he and the Tribes have concerns about the project and project area. The EIS discusses cultural resources impacts and the loss of cultural properties. Section 106 of the National Historic Preservation Act (NHPA) is a piecemeal process that leads to the development of a Programmatic Agreement (PA) to ensure BLM's responsibility under NHPA is followed. This cuts the Tribes short because other applicable federal mandates were not considered. The PA defines specific guidelines for BLM and Rodeo Creek Gold (RCG), but Chairman Gibson is concerned that the Tribes were not invited to participate in the PA development. They were only invited to concur or not. Therefore, the PA does not address the issues that Native Americans have for this very spiritually significant area. The current PA leaves the Tribes out and allows the State Historic Preservation Office (SHPO) and BLM to agree to the document for the Tribes without being fully aware of the issues. Chairman Gibson said that the Tribes are ill with worry and concern when cultural resources are disturbed and this has religious and spiritual impacts.

Chairman Gibson explained that Native Americans don't distinguish between pre-historic and historic artifacts because it is all relevant to Native American heritage having been created by their people/their ancestors. Historic and pre-historic doesn't pertain to the tribes; the tribes only have one history. Therefore, "pre-history" and anything pre-historic, is very important to the Native Americans. He said that the Draft EIS says "white chert was found as far as 93 miles away from the project area". However, that is not correct, because the chert is found in a much larger radius from the project site due to their peoples' travel to Salmon River (ID), Death Valley (CA), and other locations for trade and bartering with other Native Americans. Their people migrated through the area. The information presented in the EIS is limited. The white chert has many uses, including use for religious health. If it is allowed to be desecrated, then the Native Americans would not be protecting what was created by their Creator.

Impacts to seeps and springs are also a concern. Water is sacred to the Tribes. Water is the veins to mother earth. Chairman Gibson said that mitigation is not possible for loss of spiritual use of their Creators' works; it would be like chopping off arms and legs of Mother Earth. That would make it hard to be a whole people. How to mitigate the spiritual use of springs?

Chairman Gibson asked for clarification on the mine groundwater pumping. He said that groundwater would be pumped out at a rate of 1100 gpm for the 20-year mine life and take 50 years for the groundwater levels to recover. He mentioned that the DEIS only addresses the Section 106 NHPA process. The loss of water and spiritual values cannot be mitigated; it would be like taking the Bible away from Christians for 50 years, and telling them they cannot use it for 50 years. No mitigation is possible for taking water away. The PA process doesn't allow us to mitigate the water concern; spiritual impacts are not being considered.

Chairman Gibson explained that it is not just the white chert on the surface that is a resource needing protection. The chert is not only 20 feet deep; it goes much deeper. He believes that RCG will be taking the gold ore out of the ground through the chert.

Chairman Gibson said that the riparian/wetland impacts were unclear in the EIS. He could not tell if there were disturbances to riparian/wetland areas or not. Drying out springs will cause a loss of riparian and/or wetland areas. DEIS contains contradictory statements – no impacts to riparian versus potential impacts to riparian.

Chairman Gibson mentioned that the Draft EIS states that "Government-to-government consultation was initiated with letters". Letters are not consultation. Chairman Gibson said that this is not accurate because letters to start consultation are not useful to the Tribes. The Tribes need time to consider their reactions through spiritual measures using dances, ceremonies, etc. He said there will be a violation of the American

Indian Religious Freedom Act from this project. He hopes that his comments will be responded to. Mr. Gibson wants to hear how RCG and BLM will mitigate the losses described above and how the Tribes can participate in developing the PA. The Tribes have to watch out for their elders and youth too; the ones not yet born. The Tribes have to watch out for and protect their spiritual well-being. How are the Tribes going to be fully involved with the PA? How are the Tribes going to participate in the PA?

Chairman Gibson has concern that only the Section 106 Process is being used and other laws are not being used.

Walden Townsend

Mr. Walden Townsend said that he has concerns about mitigation. The tribes have been involved in discussions on mitigation for salmon on the Columbia River. The ultimate solution for salmon is to take down the existing dams that block salmon migration to allow safe passage. However, the agencies are not taking down the dams; they are stocking reservoirs with trout. Mr. Townsend suggested that most mitigation involves trading land and money to compensate for the loss. The Columbia River Project is a good example of mitigation.

Mr. Townsend asked how the BLM will mitigate for impacts from the Hollister Project. He recommended that it involve trading land and money and asked what the process is for mitigation and how it is decided and carried out. Is there a process to trade land and money for this project and for what is being taken? Mining is not going to go away or stop. For another project near Mountain City, there was a tailings pond at the top of a watershed that was leaking contaminants out through the plastic liner. He asked how far down does underground mining go and how do we know the impacts?

Ms. Naomi Mason asked about using royalties from the mine for mitigation.

Mr. Overcast said we will come back and have the mitigation discussions, to talk it all over and come to a consensus together to find the right mitigation. Mr. Overcast said that the BLM wants to talk to the Tribes. Mr. Townsend suggested that RCG trade land with water to mitigate for the loss of springs and spiritual values.

Tom Mason

Mr. Tom Mason said that the main disturbance of concern is for the proposed construction of a transmission line coming through the area because the power plant was built before the transmission line was approved. He suggested that RCG continue using generators, and don't provide transmission line power because other power users will come in the area. Then more mines will be built, then a supply store, etc. He said that RCG should buy more generators instead of constructing a transmission line to prevent more development coming in to the area.

Lucas Mason

Mr. Lucas Mason said that at Mount Tenabo the Tribes do not have access to their spiritual areas without miners watching over them. The Tribes do not feel that they can go out and do their spiritual practices without oversight, videotaping, and intrusions. He is concerned that the Tribes not be restricted access for the entire life of the Hollister mine.

Ms. Conner explained that the East pit and mine portal access would be restricted for safety reasons, but the Tosawihi Quarry area is public land, and the Tribes are free to access it. No change in access is expected.

Roslyn Jones

Ms. Roslyn Jones said that she received a letter from RCG asking for approval of the project, and said that there was no space on the letter to express disapproval. She said that there was no way to document or find out what

information was sent out or who the information was sent to. Ms. Jones wanted to know what other Tribes thought of the project; how other tribes feel about the project; and has there been a combined meeting with other tribes to discuss the project? Ms. Jones would like to hear what the other people/tribes have to say about the project. Ms. Jones asked if the BLM could organize combined meetings to discuss the project because the Shoshone and Paiutes are not the only Tribes affected by the project. If the BLM schedules and organizes a meeting with all the tribes, the people will come to discuss the projects.

Ms. Conner said that this was an informational pamphlet that was sent to thousands of people as an outreach effort, and that there was a place in the pamphlet to provide comments on the project that could be sent back. She said that she was sorry if the format offended any recipients. The BLM representatives all responded that the BLM didn't know about this letter and had not seen it. Ms. Conner confirmed the BLM was not contacted or involved with regards to this letter.

Mr. Overcast said that the BLM has invited communication from other Tribes, and the BLM is more than happy to bring bands and councils together to discuss the project. Mr. Overcast stated that the BLM has tried to organize meetings for multiple Tribes to gather together, but got little response. Therefore, the BLM contacts the Tribes individually. Mr. Overcast stated that the Tribes can also organize meetings and discuss projects as a larger group on their own without the BLM's involvement or organize the meeting and invite the BLM to participate.

Mr. Tom Mason explained that the Tosawihi Quarries area is in the heart of Indian land and is within our hearts. "We don't have to go out to the project site to feel it". "It affects many more people than are here" (in the meeting room). He would like to see more frequent meetings to discuss the project.

Naomi Mason

Ms. Naomi Mason asked how the long-term effects of dewatering on springs and animals that depend on the springs would be addressed and mitigated.

Ms. Stadelman explained that only the springs that are sourced in the Vinini formation have the potential to be impacted. The upper aquifers won't be affected. Most springs would not be affected by the mine's groundwater pumping and the vegetation on the surface would be fine. Ms. Stadelman said that there would not be an effect on wildlife or sage-grouse. However, the springs that could be potentially affected would be monitored and any impacts assessed. Ms. Stadelman and Mr. Overcast mentioned that if there are any impacts, then they will be addressed and mitigated. Once identified a plan of action could be developed, more NEPA may be required, etc.

Reggie Premo

Mr. Reggie Premo said that there is already substantial surface disturbance at the site from past activities, and the Native Americans do not want any more. He asked if there will be more surface disturbances at the site.

Ms. Conner explained that the majority of surface disturbance is on previously disturbed and reclaimed areas. But the transmission line would be on new disturbance. Class III surveys would be required and conducted before any surface disturbance occurs. RCG has worked hard to keep new disturbance to a minimum.

Walden Townsend

Mr. Walden Townsend asked if the BLM is looking at the impacts and mitigation on a case by case basis for each mining project, or all together. Does the BLM have a format for working with the Tribes on a case-by-case basis?

The Tribe would like a consistent way to deal with projects. He said it is the BLM's responsibility to get the mines and the Tribes talking together. The BLM should get everyone together to address future projects.

Mr. Overcast said that BLM would like to get a Memorandum of Understanding (MOU) together to outline communications and describe how consultation will be conducted with the Tribes. The BLM would prefer to use a consistent system to discuss the projects with the Tribes.

Mr. Townsend said that the BLM needs to be the middleman in this process, to organize the groups. He stated "Mitigation is paying for something in return (money and/or land); mitigation is what you pay with money and/or land to address impacts." The BLM needs to use the Tribal Councils to set up meetings. The BLM needs to pay for the travel for the Tribes to send representatives to attend the meetings.

Mr. Overcast said that he would like to collect Mr. Townsend's name and number to get the process set up. The BLM has been working with the Tribal Council to organize this process.

Naomi Mason

Ms. Naomi Mason asked how deep the chert goes in the ground. Suspect it goes deeper. Ms. Conner explained that the gold is in veins, and chert is a deposit on the surface and down to approximately 100 to 200 feet at the deepest point. Gold veins are found much deeper, in a different rock type than the chert. Scott Duncan noted that the DEIS addressed this issue, which was raised two years ago at the public scoping meetings. RCG researched the answer, and the project geologist said that the chert extends approximately 10-100 feet below the ground surface. Mining is occurring 500-2000 feet or more below the surface.

Mr. Premo said that it is up to the BLM to determine if the chert is below the gold layer being mined. The Tribes have taken tours underground and seen white-looking rock down underground, next to the gold.

Mr. Doug Crawford said that white quartz is the white rock they saw next to the gold deposits. White quartz is very different from chert and is in a different rock formation. The gold and white quartz is surrounded by the black Vinini formation rocks. Chert is in volcanic rocks or above the volcanic layer. The volcanic layer is brownish and much higher up than the Vinini formation. Mining is only being done at least 200 feet below the lower level of the chert deposits.

Mr. Townsend said that the mining is still taking out the inside of the mountain, emptying the Tribes' mountain. "Do you have Native American monitors present when cultural surveys are conducted?"

Mr. Overcast said that the Native Americans are welcome to join the BLM when they do the cultural surveys in the project area.

Mr. Mason said that when the Tribes visited the site they found things wrong-violations. For example, there was drilling mud that had been poured out over the chert chipping area. He said that is a violation and it is important to have Native Americans there to monitor and watch to be sure these actions don't occur. The whole cultural area needs to be protected. Ms. Stadelman explained that these drill mud areas were old drill sites and that drilling activities are conducted differently today. There are remnants of surface exploration from the past within the Tosawihi Quarries. Ms. Conner stated that they use a system were the drilling fluids are entirely contained in tanks.

Mr. Premo also asked about the surface disturbance violation funds. Mr. Overcast said that the Tribes and BLM need to get together to discuss how to distribute these funds.

Mr. Townsend suggested quarterly meetings with the Tribes.

Mr. Overcast explained that access to the Tosawihi Quarries is not limited or controlled. Only access to the mine portal and East pit is blocked for safety reasons. The BLM is now looking at making a "Tosawihi Quarries Area Cultural Plan" and wants input from the Native Americans. This action would have to go through the land use planning process.

Unidentified Native American

An unidentified Native American asked if underground mining would ever expand to surface mining.

Mr. Overcast said that the BLM has committed to no surface mining. Only surface exploration will be allowed at the Hollister Site. The exploration areas are fenced and surveyed before any drilling can occur. The BLM is not allowing any large drill pad construction.

Ms. Conner clarified that seven sites are currently approved for exploration drilling, as described in the May 2012 Exploration Plan. BLM archaeologists and contracted archaeologists approved the drilling areas. There will be no blading, no drill pad construction, and no new roads. All drill cuttings go into a tank; drillers are not allowed to dump cuttings on the surface.

Mr. Mason recommended using Native American monitors for the drill location, siting and approval process.

Mr. Premo said that there are chert chips all over the drilling areas. He asked why there aren't Tribal member monitors.

Mr. Overcast said that the BLM will be happy to let the Tribes know when drilling occurs so that they can watch. Mr. Overcast asked for a point of contact with the Tribes to call or notify with the drill schedule to coordinate. Ms. Mason said she would be the point of contact for drilling coordination because she is the point of contact for other activities and communications as well.

An unidentified Native American stated that they are running out of space and need to expand the reservation. The US Forest Service is closing roads; therefore, it is getting more difficult to hunt and fish. A land exchange for more land at the reservation to expand it would be a form of mitigation.

Roslyn Jones

Ms. Jones said that the land expansion or land exchange is a good idea and would be helpful for their hunting and gathering/collecting activities. It would support their future generations.

Donna Jackson

Ms. Donna Jackson asked if more jobs would be created by the proposed mining development. She said the Tribes need jobs. However, the cost of living is high in Elko, Winnemucca, and Battle Mountain. Therefore jobs at the mines are expensive to actually work there. The mines should be providing and paying transportation or busing Native American workers. The mines should have housing or man camps for the Native Americans.

Ms. Conner said that RCG is always looking for qualified workers. They would train workers, and could look at helping with transportation. There are 140 workers at the mine currently, and up to a total of 200 will be needed. About 40-60 more workers would be hired for the proposed project.

Mr. Mason said that mitigation could be housing assistance in Tuscarora for Native Americans to work at the mine.

Walden Townsend

Mr. Townsend asked who defines the legal entity of the Tribes. And what legal reason makes the mines mitigate for impacts? He wondered what compels the BLM to talk to the Tribes.

Mr. Overcast said that the BLM is responsible for fulfilling their legal obligations, including consultation with the Tribes. Formal consultation is ongoing regardless of the project's status, so it can continue after the Final EIS is published.

Mr. Townsend asked what legal recourse the Tribes have. Mr. Overcast said that there is a multiple use mandate for public lands that the BLM works hard to comply with in concert with applicable laws.

Unidentified Native American

An unidentified Native American asked if other public meetings had been held. Ms. Stadelman responded: Battle Mountain BLM Office on June 26, 2012. No one showed up. Elko BLM Office on June 27, 2012. A few people showed up about 15-20. How many Native Americans attended? Only Native American attending the Elko meeting was Felix Ike.

Note

All of the comment forms were left with various Native Americans to hand out for people to submit comments.

Appendix C

Monitoring and Mitigation Plan

HOLLISTER UNDERGROUND MINE PROJECT
MONITORING AND MITIGATION PLAN

HOLLISTER UNDERGROUND MINE PROJECT
MONITORING AND MITIGATION PLAN

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INTRODUCTION

This Monitoring and Mitigation Plan ("Plan") further elaborates on the monitoring, mitigation and conservation measures referenced in the resource sections of the Environmental Impact Statement (EIS) prepared for the Hollister Underground Mine Project (Project). The monitoring and mitigation measures discussed in this Plan cover the range of impacts of the proposed Project. The Plan may not address monitoring or mitigation for impacts already addressed by the applicant committed protection measures described in the EIS. In response to comments received on the DEIS, and further evaluation, this Plan revises and provides detail for certain monitoring and mitigation measures that were described in the DEIS, and proposes certain additional monitoring and mitigation measures not originally included in the DEIS. Some contingent mitigation measures may require future permitting or National Environmental Policy Act (NEPA) analysis at the time of design and prior to implementation.

The following previously approved Bureau of Land Management (BLM) or state plans are incorporated herein by reference: Noxious Weed Prevention Control Plan, Reclamation Plan, Programmatic Agreement, and Fugitive Dust Control Plan.

The CEQ Regulations (40 CFR §§ 1500-1508) for Implementing the Procedural Provisions of NEPA define mitigation (40 CFR §§ 1508.20) as follows:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action;

(b) Minimizing impacts by limiting the degree of magnitude of the action and its implementation;

(c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or

(e) Compensating for the impact by replacing or providing substitute resources or environments.

LAND USE AND ACCESS

Potential Impact: Little Antelope Creek Road crosses Little Antelope Creek at least three times within the Project boundary. The Silver Cloud Road and the Little Antelope Creek Road cross Antelope Creek downstream from the confluence of Little Antelope Creek and Antelope Creek. It is possible, although not expected, that increased water discharge into Little Antelope Creek via the National Pollutant Discharge Elimination System (NPDES) discharge may cause the existing low water crossings to no longer be passable, thus periodically limiting access along Little Antelope Creek Road or at the Antelope Creek and Little Antelope Creek Road crossing or Antelope Creek and the Silver Cloud Road crossing.

Monitoring and Mitigation Measure LU-1

Monitoring: Upon commencement of NPDES-permitted clean water discharges into Little Antelope Creek, Rodeo Creek Gold (RCG) would visually monitor: 1) the low water crossings along Little Antelope Creek Road potentially affected by increased water flow due to the NPDES discharge, 2) the intersection of the Little Antelope Creek Road and Antelope Creek, and 3) the intersection of the Silver Cloud Road with Antelope Creek. Figure 1 of this Plan shows the approximate location of the low water crossings which would be monitored.

Such monitoring would be performed on a weekly basis during active discharge periods to determine whether such crossings have become impassable. If weekly monitoring indicates that a crossing has become impassable, then RCG would monitor that crossing for five consecutive days following the discovery and notify the BLM within 1 week of the monitoring results. If, after three months of NPDES-permitted clean water discharges, the weekly monitoring shows no impacts to access at a particular low water crossing location, RCG may reduce the frequency of monitoring at that location to monthly monitoring during discharge periods.

RCG would document monitoring results and would provide the BLM a summary report of monitoring results 6 months after NPDES-permitted clean water discharge begins. Thereafter, RCG would provide summary reports on an annual basis.

Mitigation: The low water crossings along Little Antelope Creek, the intersection of the Little Antelope Creek Road and Antelope Creek, and the intersection of the Silver Cloud Road and Antelope Creek, are typically impassible for portions of the spring runoff period. If, outside of spring runoff periods, any of the low water crossings become impassible for more than 5 consecutive days, then RCG would coordinate with the BLM to design and install BLM-approved rock/concrete aprons or other low-water crossings or culverts. Any such installations would be appropriately sized and placed to allow passage by aquatic life at each low-water crossing that is no longer passable by vehicle. In the event that rock/concrete aprons or crossings or culverts are deemed not appropriate given the location or level of impact, RCG and the BLM would meet to discuss other appropriate measures that would be designed and implemented to ensure access in the area.

Depending upon the design and surface impacts of the culvert, rock/concrete aprons or crossings or other mitigation measures, implementation of mitigation may require further federal or state permitting and associated reviews.

Effectiveness: In the event that NPDES-permitted clean water discharge into Little Antelope Creek renders low-water crossings impassible, placing culverts or rock/concrete

aprons or low-water crossings (that allow for passage by aquatic life) at the affected road crossings would maintain accessibility with a vehicle and allow for aquatic species to move up and down the stream channels. This mitigation measure would be fully effective at maintaining access to affected road crossings.

GROUNDWATER AND SURFACE WATER RESOURCES

Groundwater Resources

Potential Impact: Due to possible long-term effects of technical groundwater removal (to keep the underground mine workings dry for operations), a reduction in flow rates could occur at up to 15 seeps, springs and spring complexes associated with the Vinini Formation and the Pennsylvanian/Permian Strathearn Formation that fall within the maximum extent of the 10-foot groundwater drawdown contour and that lie less than 50 feet above the groundwater elevation. The characteristics of each of the 15 "high potential" seeps and springs are summarized in Table 3.6-7 in the DEIS. The location of the seeps and the springs are illustrated on Figure 2 of this Plan.

The groundwater model also shows that drawdown associated with proposed mine groundwater removal has the potential to reduce spring-derived flows at two perennial stream reaches: 1) Alkali Creek to its confluence with Antelope Creek and 2) Squaw Creek to its confluence with Antelope Creek. These two perennial stream reaches are downstream of potentially impacted Spring Complex Numbers 1 and 3. The location of the two perennial stream reaches are illustrated on Figure 3.6-2 in the DEIS. These perennial stream reaches are water features with established beneficial uses, including surface water for livestock and wildlife. If such surface waters are impacted, grazing and wildlife use could then relocate and concentrate in the remaining available water and riparian habitat, with consequent potential increased impacts to those areas.

Finally, reduced flow at the seeps, springs, and spring complexes from groundwater drawdown may impact up to 11.8 acres of associated riparian and wetland habitat along Antelope Creek. Groundwater drawdown also may impact 0.20 acre of riparian and wetland habitat unassociated with seeps or springs. In addition, 5.34 acres of riparian and wetland habitat have been identified as "high potential" for impacts and 6.64 acres have been identified as "low potential" for impacts. The characteristics of each of the "high potential" wetland and riparian areas are summarized in Table 3.9-2 in the DEIS. The location of the 12 acres of potentially impacted riparian and wetland habitat are illustrated on Figure 2 of this Plan.

Monitoring and Mitigation for Groundwater Removal Impacts – *Revised Mitigation Measure GW-1*

Monitoring: The monitoring required by Revised Mitigation Measure GW-1 includes monitoring of groundwater levels as well as measurements of surface flow.

During the life of the mine and through reclamation, RCG would conduct groundwater monitoring as described below. A monitoring report shall be provided to the BLM by April 30 of each year. The report would be provided on a CD, or other digital storage format compatible with the BLM's information technology. The report would include applicable information such as, but not limited to, the methodology used to collect data, field data information, chemical analyses, depth to water, and discussion or conclusion of observations. The monitoring report would provide hydrographs from all piezometers and monitoring wells which would reflect baseline levels and the quarterly depth to groundwater measurements. The report would illustrate all piezometer, monitoring well,

and sampling site locations. Comprehensive electronic water level files would be provided to the BLM with the monitoring report, and at any time requested by the BLM. RCG would conduct the following groundwater level monitoring, according to the protocols indicated below:

- Groundwater Monitoring within the Project Area: RCG would monitor groundwater by conducting quarterly depth to groundwater measurements at existing monitoring wells (H6-227WW, H7-252WW, H7-253WW, H7-254WW, and DGW-2C) in the Vinini formation within the Project boundary. The location of these monitoring wells is shown on Figure 3 in this Plan. See Attachment A, Water Resource Monitoring Summary, of this monitoring and mitigation plan.
    - The southern and northern most wells (DGW-2C and H7-254WW) along with the two new piezometers or monitoring wells, located north to northeast of the mine, would be sampled for field parameters. Figure 3 illustrates the general proposed location for the two new wells. The field parameters (i.e., depth to water, pH, temperature, specific conductivity, and total dissolved solids), would be monitored quarterly. Chemical analyses of each monitoring well would be done quarterly utilizing NDEP Profile 1.
    - If the field parameter monitoring shows major changes in characteristics during the groundwater measurements, the monitoring could be changed from quarterly monitoring to monthly monitoring for affected wells. If the Profile 1 chemical analysis shows no change, monitoring could be changed to annual monitoring.
    - Monitoring data would be collected and recorded using a standardized protocol and format. The protocols for monitoring groundwater levels at these locations are discussed in Protocol A attached hereto.
- Barrick Wells: There are currently three wells (identified as BX-4s, BX-2Rs, and NA-46), east of the Hollister Project boundary, which are owned and monitored by Barrick. Barrick collects depth to groundwater level data at these wells, which is within the predicted Hollister Mine 10-foot drawdown contour and within the Vinini Formation. The location of these wells is reflected on Figure 3 in this Plan. The BLM would provide RCG with the raw depth to groundwater data (public information) received from Barrick for these wells. Barrick data would be utilized by RCG to incorporate into, further refine, and calibrate the groundwater model, as appropriate.
- New North/Northeast Area Groundwater Monitoring Wells or Piezometers: Because of the relatively small rate of groundwater removal within the mine workings, groundwater impacts outside of the immediate underground mine areas are not immediately anticipated. To verify the groundwater model and to provide additional drawdown data, RCG would establish two new groundwater monitoring locations: one to the north of the underground workings within the Project area, and one to the northeast of the underground workings within the Project area. These wells would be used to collect data from the Vinini Formation. The approximate locations of these two new wells are shown on Figure 3 of this Plan. The north monitoring location shall be established within 1 year of Project approval. The northeast monitoring location shall be established within 2 years of Project approval.
- Contingent Groundwater Monitoring Wells or Piezometers for Impacts to Springs: Two of the Barrick monitoring wells (BX-2Rs and BX-4s) are located between the Project area and the spring complexes potentially affected by Hollister Mine water removal. Because of the relatively small rate of groundwater

removal within the mine workings, groundwater impacts outside of the immediate underground mine areas are not immediately anticipated. If BX-2Rs or BX-4s show consistent decline in groundwater elevations of more than 10 feet below the groundwater baseline elevation for these wells, then RCG shall establish a new monitoring well or piezometer at an appropriate location (determined in coordination with the BLM) between the impacted Barrick well and the spring complex(es). For BX-2Rs, the current groundwater elevation is approximately 5,500 feet, with a trigger elevation of 5,490 feet above mean level (aml). Well BX-4s has a current groundwater elevation of approximately 5,600 feet with a trigger elevation of 5,588 feet aml.

- As groundwater monitoring wells are mined out, become nonfunctional, reach trigger elevations, or dry up, replacement wells would be installed in a location determined by RCG in consultation with the BLM. As groundwater data is acquired from the monitoring wells, additional step-out wells or new wells may be installed as needed to monitor groundwater movement.

At least every 5 years and up to every 2 years, if warranted, RCG would recalibrate the groundwater model and provide the results to the BLM. The monitoring plan would be adjusted as necessary to identify potential impacts to perennial surface water resources and groundwater resources within the area potentially affected by mine-related drawdown, as depicted in Figure 3.5-2 and 3.5-15 of the DEIS (10-foot drawdown contour). Revisions to the monitoring plan would be reviewed and approved by the BLM.

Surface Water Resources

***Monitoring*:** RCG would conduct surface water monitoring. The monitoring, testing, and reporting requirements for the seeps and springs are identified in Attachment A. Monitoring data would be recorded using Protocol B. RCG would provide reports to the BLM for the life of the mine. RCG would provide the BLM with an annual report regarding the surface water flow at the springs listed below and shown in Attachment A. The report would be due by April 30 each year following the data collection the prior fall. The surface water report may be combined into one report with the groundwater report.

Mitigation: Impacts to surface waters (i.e., seeps, springs, and wetlands) are not certain, and all are located on private land. In lieu of monitoring for impacts to the seeps, springs and wetlands potentially affected by mine water removal and then establishing mitigation to address such impacts, RCG would mitigate for any such impacts through a Riparian Mitigation Fund to be established within 120 days of Project approval. The Riparian Mitigation Fund shall be a separate, interest-bearing account established and controlled by the BLM and funded by RCG. Total amount to be funded is $120,000, based on a replacement ratio of 1:1. Funds in the Riparian Mitigation Fund would be available to the BLM to fund on-the-ground improvements such as site assessments, studies, and other enhancement measures for riparian habitats on public or private lands within the Twenty-five Allotment.

***Effectiveness**:* The following information describes the anticipated effectiveness of the Revised Mitigation Measure GW-1, identified above.

While the EIS groundwater modeling identifies the potential for impacts to 15 seeps, or springs within four spring complexes, and two stream reaches, the GW-1 monitoring is intended to identify actual impacts of the Project on groundwater levels. This information would ensure that appropriate mitigation is implemented at an early stage to effectively address actual identified impacts. Water quantity measurements would include pumpage

rates from groundwater pumping, water levels in monitoring wells and piezometers, and flow rates for surface water monitoring locations as identified in Attachment A of this plan.

The monitoring measures are designed to ensure early detection and remediation of potential Project-related impacts to groundwater and surface water quantity within the 10-foot drawdown contour. Groundwater data also would be used to refine the groundwater model.

Establishment of the Riparian Mitigation Fund would provide funds to be utilized by the BLM for improvements to wetland and riparian habitats in the area, whether or not there are actual impacts to such wetland and riparian habitats from the Project. Such funds would allow the BLM to improve or offset Project impacts (if any) to wetland and riparian areas. BLM also would be able to use such funds to mitigate for non-Project related impacts or for wetland and riparian improvements in the Twenty-five Allotment. The funds, therefore, would be effective in mitigating or offsetting any Project impacts.

Environmental Impacts Associated with Implementation of Mitigation Measures. Any surface disturbance from the above-identified mitigation measures would be managed and reclaimed in accordance with BLM and State of Nevada requirements. Surface disturbance impacts associated with implementation of site-specific mitigation are expected to be reclaimed within 3 years after disturbance. For future projects funded through the Riparian Mitigation Fund, all policies and procedures applicable to activities on public lands including completion of NEPA and conducting Section 106 compliance would be followed.

Monitoring and Mitigation for Water Quality Impacts

Potential Impact: Potential impacts to water quality from the Project not specifically addressed by RCG's applicant committed environmental protection measures include poor water quality within the underground workings as the workings refill with water approximately 130 years after cessation of mining. Migration of that water may result in elevated pH, Al, Sb, Be, Cr, Se, SO_4, Th, and TDS, toward the southwest corner of the Project boundary (in-situ mine water). While unlikely, there also is concern that storage of waste rock in the West Pit could affect water quality in Little Antelope Creek from increased flows in the MA-1 seep.

Monitoring and Mitigation Measure GW-2

Monitoring: Water quality monitoring of groundwater and surface water resources would consist of:

Monitoring Wells and Piezometers: RCG would test water quality at the monitoring wells and piezometers as identified in Protocol A. The location of the wells and piezometers from which water quality would be monitored is illustrated on Figure 3. RCG would provide reports of such monitoring to the BLM for the life of the mine.

Little Antelope Creek: RCG is currently monitoring surface water quality along Little Antelope Creek and would continue to do so. RCG also would monitor water quality in Little Antelope Creek pursuant to RCG's NPDES discharge permit. See Protocol B. RCG would provide the BLM with a copy of all reports submitted to NDEP. See Figure 4 for current surface water monitoring locations along or near Little Antelope Creek. Additional monitoring locations may be required pursuant to the NPDES discharge permit.

MA-1 Seep: RCG would monitor water quality at the MA-1 seep via quarterly sampling events at the MA-1 seep, GBG-02, and GBG-03, in accordance with Protocol B. The monitoring locations are illustrated on Figure 4. RCG would provide reports to BLM for the life of the mine.

TCP Springs: While no impacts are anticipated, because these springs are not connected to any aquifer that could be impacted by the Project and therefore no mitigation is proposed, surface water quality and flow at the Ivanhoe, Buttercup and Antelope springs would continue to be monitored because of their cultural significance to the Western Shoshone people of the area. RCG would continue to monitor water quality (and quantity) at these springs to provide information to the BLM for their management. Monitoring would occur annually in the fall following the Project approval and would continue during the life of the mine.

In-situ Mine Water: No monitoring is proposed for the first 100 years, because there would be no in-situ mine water during active mining operations and prior to recovery of the groundwater table. Monitoring of groundwater quality would be required beginning at 100 years after cessation of mining when the in-situ mine water is predicted to begin migrating toward the southwest Project boundary.

Mitigation:

MA-1 Seep: The MA-1 seep currently has little flow, and does not normally reach Little Antelope Creek. If monitoring of the MA-1 seep and/or Little Antelope Creek, however, indicates impaired water flow of 1 gallon per minute or more from the MA-1 seep having the potential to reach Little Antelope Creek for a sustained six months or more of non-seasonal influenced events such as spring run-off or storms (precipitation events), then RCG would construct an artificial wetland in accordance with then-recommended parameters. Should the artificial wetland prove ineffective, or if flow is not sufficient to sustain a wetland, RCG would install a collection device to remove any impaired water flowing from the MA-1 seep and transport such water off-site to a permitted disposal or treatment facility.

In-situ Mine Water: Currently, there are no surface or underground receptors for such water. However, potential receptors cannot be predicted 100 to 400 years into the future. Within two years of Project approval, the BLM would establish and RCG would fund a Long-Term Trust Fund (LTTF) for a monitoring well in an appropriate location toward the southwest corner of the Project boundary. This LTTF would be established to ensure that the BLM or other managing authority is able to monitor the attenuation of the groundwater or implement other measures that become applicable treatment options due to advances or improvements in technology over time. It is impractical to establish a monitor well at this point in time because migration of this groundwater is not anticipated to begin until after equilibrium is reached within the underground workings in approximately 130 years. The LTTF, therefore, shall be sufficient to ensure adequate funds are available when the BLM deems it appropriate to fund such a well at approximately 100 years post mining. In approximately 400 years, based on modeling, the in-situ mine water would have reached steady state and potentially migrated to the southwest. Within 1.5 miles, natural attenuation is predicted to be met for all state water quality standards except for antimony. Antimony concentrations are naturally elevated, and the modeled concentration level would not be significantly elevated above current background levels.

EPA recommends that monitored attenuation, potentially coupled with institutional controls, is appropriate mitigation to contaminated in-situ groundwater. *See, EPA, 2001.*

A Citizen's Guide to Monitored Natural Attenuation, United States Environmental Protection Agency, April and EPA, 2007; Metal Attenuation Processes at Mining Sites, United States Environmental Protection Agency, September.

Effectiveness: Constructing an artificial wetland to treat any identified RCG water quality impacts through the MA-1 seep should be effective given current conditions at the site. Should conditions change that would make an artificial wetland less effective, or should a constructed wetland prove less effective than anticipated, collecting any impaired water at the MA-1 seep and disposing or treating such water off-site would be effective in preventing impacts to Little Antelope Creek.

Establishing a LTTF to enable the BLM to perform monitored attenuation of the in-situ mine water movement, and to establish institutional controls if needed. This measure would be effective in preventing impacts to human or surface receptors for such water, if any such receptors should be established in the future.

SURFACE DISTURBANCE IMPACTS

Potential Impact: Surface disturbance and other activity at the Project site and at outlying road improvements and maintenance, such as the use of chemical treatments (e.g., magnesium chloride, dust suppressants), could result in vegetation and soil removal, and may create runoff. Impacts from such activities could include erosion, sedimentation, and reduced runoff water quality, which could drain to nearby streams or springs. Increased runoff or concentrated flows could reduce channel and bank stability, particularly on steep slopes near stream crossings.

Mitigation for Impacts Caused by Surface Disturbance

Mitigation Measure SW-1

***Monitoring*:** Annually, in early spring and after heavy precipitation events, RCG would survey low water crossings, travel routes, and direct disturbance areas around the mine and unreclaimed exploration sites for erosion and sedimentation. Monitoring would continue until the reclamation bond is released.

Mitigation: If erosion or sedimentation is found to occur, RCG would immediately install weed-free hay bales, silt fences, or other erosion controls to stabilize the area. RCG would monitor any stabilized site to determine if such measures are effective and replace hay bales and silt fences as needed. If Project-related changes to stream channels are identified, additional mitigation and stabilization practices such as installation of gabions or concrete diversion panels or placement of rock material, would be implemented and maintained by RCG in coordination with the BLM. Other protective measures also are provided by the storm water pollution prevention plan and applicant committed environmental protection measures. Disturbed areas no longer in use for mining or exploration activities would be reclaimed in accordance with the reclamation plan.

***Effectiveness*:** The monitoring measures of SW-1 are designed to ensure early detection and remediation of potential Project-related erosion or sedimentation. Hay bales, silt fences, and other physical controls are considered highly effective in controlling sedimentation, erosion, and preventing changes in stream channels. Dust suppressants such as magnesium chloride are an effective means of preventing air quality issues and sedimentation concerns for stream channels adjacent to roads. This mitigation measure would improve the stability of land surfaces and surface water quality in the Project area**.**

SOILS AND RECLAMATION

Potential Impact: Recent tests have demonstrated that the existing growth media stockpile in the south Rapid Infiltration Basin (RIB) stockpile has elevated salts and sodium. Elevated levels can prohibit plant growth and reduce the effectiveness of reclamation.

Mitigation Measure SL-1

Mitigation: RCG would use a BLM-approved salt and sodium tolerant seed mixture for areas where the south RIB stockpile is used for reclamation. Adding other amendments such as organic matter or elemental sulfur would be used as necessary to establish vegetation.

Effectiveness: While excess salts and sodium can prohibit plant growth, certain vegetation types are adapted to these types of conditions. Use of a seed mixture with species that can tolerate the salt and sodium content of the growth media in the south rapid infiltration basin stockpile would be effective in addressing the potential for diminished plant growth during reclamation.

VEGETATION

Potential Impact: Impacts to vegetation resulting from the existing and proposed surface disturbance would be addressed as set forth in RCG's Reclamation Plan and in accordance with the BLM and NDEP policy guidance, and no additional mitigation is proposed.

Monitoring and Mitigation Measure VR-1

Monitoring: RCG would monitor basal and foliar cover of reclaimed vegetation and provide annual monitoring reports to the BLM and NDEP for review and assessment of reclamation success.

Mitigation: If BLM inspection results in a determination that reclamation has not succeeded, RCG would consult with the BLM to develop a second seeding to be based on the types of outcomes desired and which addresses the specific lack of success of the initial revegetation attempt.

Effectiveness: RCG's reseeding plan contained in the Reclamation Plan would be effective because it requires use of a BLM-approved seed mixture of grasses, forbs, and shrubs native to the Project area. Reclamation at exploration sites in the Project area using a similar protocol as contained in the Reclamation Plan has proven effective at re-establishing native vegetation. It is expected that re-vegetation for the Project would be similarly successful. Also as noted, if monitoring identifies less than desirable reclamation in certain areas, a second seeding designed to address the specific issue would be developed and implemented which would be effective in addressing such issues.

RIPARIAN AND WETLANDS

In addition to the mitigation and monitoring described in GW-1, GW-2, and AR-1, the following measures describe mitigation to wetland vegetation and riparian vegetation potentially affected by groundwater drawdown.

Potential Impact: As discussed above, potential impacts from groundwater removal from the underground workings, reduced flow at the seeps, springs and spring complexes from groundwater drawdown may impact up to 12 acres of riparian and wetland habitat along Antelope Creek. Because all or most of the riparian and wetland areas are privately owned, and not under management by the BLM, the landowners could prevent access for the monitoring and mitigation measures described in the DEIS. The inability to implement mitigation measures described in this mitigation plan to prevent impacts or restore riparian areas or wetlands could lead to a cumulative loss of wetlands within the 10-foot groundwater drawdown contour.

Mitigation Measure RW-1

Mitigation: See GW-1 (Riparian Mitigation Fund) and AR-1 (Springsnail Mitigation Fund). The mitigation measures that would be implemented for potential impacts from groundwater drawdown and potential impacts to aquatic resources also mitigate potential impacts to wetland and riparian areas.

Effectiveness: See the effectiveness discussions of GW-1 and AR-1.

Potential Impact: As a result of the discharge of pumped groundwater into Little Antelope Creek, additional riparian and/or wetlands may be created. This new habitat could be impacted by livestock attracted to the new habitat.

Monitoring and Mitigation Measure RW-2

Monitoring and Mitigation Measure: To preserve this new habitat, RCG would repair and maintain the two adjacent exclosures to each other along Little Antelope Creek for the life of the Project to prevent access by livestock. Evaluation of the two exclosures may warrant adjustments to the fencing, creating one exclosure instead of two, as well as changes to the fence line to incorporate the springs into the exclosure.

RCG would install one cattleguard on the lower end of the existing exclosure on Little Antelope Creek. RCG would maintain the four cattleguards along the Little Antelope Creek Road. Maintenance of the cattlequards includes, but is not limited to, lifting the rails and cleaning the soil material out of the area below the rails; ensuring the rails and wings are intact; ensuring that the fence wiring is attached to the fence post and cattlequard wing; and ensuring that soil material in the roadbed is level with the base, thus preventing a drop off or erosion around the cattleguard. RCG would enter into a cooperative agreement for materials, labor, and maintenance with the BLM Elko District to implement this measure.

Effectiveness: This measure would enhance and protect riparian vegetation by excluding cattle grazing from this segment (exclosure area) of Little Antelope Creek. This measure would help offset any loss of riparian and wetland areas caused by the groundwater drawdown and enhance water quality by preventing grazing caused erosion and sedimentation.

NOXIOUS WEEDS AND NON-NATIVE INVASIVE PLANT SPECIES

Potential Impact: Surface disturbance from mining activities could allow for the establishment of noxious weeds.

Monitoring and Mitigation Measure NW-1

Monitoring and Mitigation Measure: During construction, operation, and reclamation, RCG would identify and monitor the Project area for the establishment of noxious weeds and non-native invasive plant species. RCG would treat weed infestations according to its Noxious Weed Prevention and Control Plan, and the BLM and Nevada Division of Environmental Protection regulations. RCG's weed prevention measures consist of the following:

- Hand pulling or digging of weeds;
- Spraying of BLM-approved herbicides;
- Washing of earthmoving equipment before mobilizing on to site;
- Inspection of areas and roads transversed by equipment (trucks, etc.);
- Use of certified weed-free plant materials (i.e., straw) for soil protection; and
- Use of certified weed-free seed mixtures to revegetate disturbed areas.

RCG would provide the weed treatment information included in Attachment B of this plan to the BLM when treating noxious weeds or non-native invasive plants species on public lands.

Effectiveness: Based upon experience with implementing these measures on other projects, the BLM and RCG believe these measures would be effective to control the spread of noxious weeds and non-native plant species.

Potential Impact: If groundwater drawdown results in the reduction of riparian and wetland communities within the maximum extent of the 10-foot groundwater drawdown contour, noxious weeds could become established in such areas.

Monitoring and Mitigation Measure NW-2[1]

Monitoring and Mitigation Measure: RCG would take commercially reasonable efforts to come to an agreement with the private landowners of the wetlands to allow RCG to monitor for and control any noxious weed infestations in such riparian/wetland areas consistent with its Noxious Weed Prevention and Control Plan. RCG would not be required to provide any consideration to the landowner in exchange for access, other than performing or paying for such weed control.

Effectiveness: Implementation of such noxious weed control measures would minimize the potential spread of noxious weeds and non-native invasive plant species.

RANGE RESOURCES

See GW-1 for monitoring for, and mitigation of, any long-term loss of surface water sources for livestock. Previous RR-1 from the Draft EIS is now incorporated into GW-1.

[1] This mitigation measure was identified in the Draft EIS as RW-3. As this mitigation measure addresses noxious weeds, it has been moved to this section and re-numbered as NW-2.

WILDLIFE

See GW-1 for monitoring for, and mitigation of, any long-term loss of surface water sources for wildlife.

AQUATIC RESOURCES

Potential Impact: There are nine springs associated with springsnails that fall within the 10-foot drawdown contour for the Hollister Project. Eight of the springs are within Spring Complex Number 4 and one spring is in Spring Complex Number 3 (Figure 2). Springsnail populations (Figure 5) may be at risk from groundwater pumping which could potentially reduce flow in these spring complexes.

Monitoring and Mitigation Measure AR-1

Monitoring: Monitoring the wells BX-2Rs and BX-4s would identify drawdown impacts in the direction of the spring complexes well before the springs would be impacted. The contingency monitoring location (in Monitoring Measure GW-1) to be established if impacts are identified in either BX-2Rs or BX-4s would further identify the potential for impacts to the springsnail spring complexes well before such impacts would occur.

Mitigation: Springs which supports springsnail and which occur on private lands in Spring Complex Numbers 3 and 4 (described above) would be fenced with steel or other fencing material within two years of Project approval. Fence location(s) would be determined in the field in consultation with the private landowner or representative, the Nevada Department of Wildlife (NDOW), and the BLM. Note that not all springs containing springsnails may be fenced depending on desires of the landowner. The total dollar amount for this commitment, including labor and materials is currently estimated at $62,000, based on projections for constructing up to four exclosures with three rail pipe fence. Costs for associated cultural inventories and survey and design are not included and are the responsibility of RCG. In addition, RCG would work directly with the private landowner or representative to complete the actual building phase of the Project, including purchase of materials and contracting construction.

Impacts to springs containing springsnails are not certain. In lieu of additional monitoring for impacts to springsnail populations potentially affected by Hollister Mine water removal and then establishing mitigation to address such impacts, RCG would mitigate for any such impacts through a Springsnail Mitigation Fund to be established within one year of Project approval. The Springsnail Mitigation Fund shall be a separate, interest-bearing account established and controlled by the BLM and funded by RCG. Total amount to be funded is $42,000 based on a replacement ratio of 1:1. Funds in the Springsnail Mitigation Fund would be available to the BLM to fund on-the-ground improvements, monitoring, studies, general springsnail research, and/or other enhancement measures for springsnails or their habitats.

Effectiveness*:* The following information describes the anticipated effectiveness of Mitigation Measure AR-1, identified above.

Spring Fencing: Fencing and protection of springs along the Upper Antelope Creek drainage would limit livestock impacts and improve habitat condition and resiliency. Currently, these areas are impacted by livestock in the form of trampling and compaction, and in some locations, overuse of riparian plant species. Protective fencing would allow spring habitats to function properly, resulting in reduced erosion rates, improved

infiltration and water storage capacity, energy dissipation, expansion of wetland and riparian plant communities, and greater biodiversity.

Springsnail Mitigation Fund: Establishment of the Springsnail Mitigation Fund would provide the BLM with funds to benefit springsnails in the form of research, monitoring, habitat improvement, or other measures whether or not there are actual impacts to this species from the Project. Such funds would allow the BLM to improve or offset Project impacts (if any) to springsnails. Applicable mitigation measures for springsnails are unknown at this time. For example, past attempts to mitigate by relocating springsnails failed; therefore, mitigation measures may be ineffective for springsnails. Due to the lack of information and knowledge regarding springsnails and known applicable mitigation measures, utilizing this fund to monitor, provide research opportunities, and habitat enhancement measures may be the only means to effectively try to mitigate for springsnails.

Environmental Impacts Associated with Implementation of Mitigation Measure

Spring Fencing: Improved ecological function of springs is expected to directly and indirectly benefit many species of wildlife including those considered special status. Species such as springsnails, sage-grouse, migratory birds, and many species of mammals are dependent on functioning riparian habitats during all or some parts of their life cycles. Fencing of springs along Antelope Creek also would add a positive cumulative impact to on-going efforts to improve riparian habitats in other parts of the Twenty-five Allotment.

Potential adverse direct and indirect impacts from fencing of springs along Upper Antelope Creek include ground disturbance, creation of perching areas for predatory bird species, and a possible collision hazard for some species of wildlife. These impacts would be reduced or mitigated by the following resource protection stipulations: fences would be constructed to the BLM specifications to provide for wildlife passage; disturbed areas would be reseeded or reclaimed; and standard protocols for limiting expansion of weed infestations would be followed.

The proposed mitigation would be consistent with sage-grouse conservation measures outlined in the BLM instruction memorandums 2012-043 (BLM 2011a) and 2012-044 (BLM 2011b) and the Western Association of Fish and Wildlife Agencies (WAFWA) guidelines (Connelly et al. 2000).

Springsnail Mitigation Fund: For future projects funded through the Springsnail Mitigation Fund, all policies and procedures applicable to activities on public lands including completion of NEPA and conducting Section 106 compliance would be followed.

SPECIAL STATUS SPECIES

To prevent disruption of greater sage-grouse breeding activities, RCG adopted in its applicant committed environmental protection measures section of the plan of operations, appropriate BMPs described in *A Report on National Greater Sage-grouse Conservation Measures*, (Sage-grouse National Technical Team (NTT) 2011), as described in Section 2.4.9. During the greater sage-grouse breeding season (March 15- June 15), no exploration activities would be allowed within 3 miles or line-of-sight of an active lek from 1 hour before sunrise to 10:00 am and speed limits would be posted on access roads.

***Issue*:** Northeastern Nevada has more greater sage-grouse leks than personnel to survey them annually. As such, many leks have inconsistent survey data. Due to the remoteness of the East Velvet, East Clementine, and Big Butte leks (Figure 6), NDOW has only sporadic data on sage-grouse attendance at these leks.

Monitoring Measure SSS-1

***Monitoring*:** RCG would hire an appropriate contractor or train its personnel to conduct lek surveys according to NDOW protocols for the East Velvet, East Clementine, and Big Butte leks each year during the breeding season (March 15 to June 15) for the life of the mine and report the results to the BLM and NDOW.

Effectiveness: By implementing SSS-1, accurate annual lek counts would be obtained for the East Velvet, East Clementine, and Big Butte leks. Based on trend data for these three leks, the BLM and NDOW would be able to monitor the status of the leks and determine if any Project impacts are occurring to these leks and sage-grouse. The collection of this data would provide valuable information to the BLM and NDOW to assist them with broader sage-grouse management and planning efforts.

PALEONTOLOGICAL RESOURCES

Potential Impact: Construction of the transmission line could have potential impacts to invertebrate, vertebrate, or plant fossils that may not have been fully identified in pre-Project surveys.

Monitoring and Mitigation Measure PR-1

Monitoring: During construction, installation, and reclamation of the proposed transmission line, RCG would hire a qualified paleontological specialist to monitor areas with high potential for the occurrence of paleontological resources.

Mitigation: If vertebrate fossils or unique or site-specific invertebrate or plant fossils are found, the regulations at §3809.420(b)(8)) would be implemented. Work on the transmission line by NV Energy would stop immediately and the BLM would be notified. The BLM would assess the situation and determine any necessary mitigation. A qualified specialist would evaluate the site, report on the findings, and recommend preservation of the fossils or data recovery.

Effectiveness: This measure would allow for the evaluation of any vertebrate, invertebrate, or plant fossils that may be discovered and would provide adequate time for their preservation or data recovery.

CULTURAL RESOURCES

Potential Impact: The Project is located within an area known to contain a diverse and dense population of Historic Properties. Construction of overhead electric transmission and distribution lines may impact Historic Properties. Mining and exploration may encounter Historic Properties. The heightened public awareness of the area due to the EIS may create negative impacts to Historic Properties.

Monitoring and Mitigation Measure CR-1

Monitoring: The Programmatic Agreement (PA) attached to the Final EIS (Appendix A) describes the procedures whereby the BLM, RCG and the Tribes would monitor for

potential direct and indirect adverse effects to Historic and Traditional Cultural Properties (TCPs).

Mitigation: Subsequent to the Draft EIS, and due to concerns of area Tribes with data recovery, the BLM determined that Historic Properties potentially impacted by Project activities could be avoided through pre-planning efforts and implementation of the avoidance protocols in the PA. Therefore, the BLM determined that the previously considered Historic Properties Treatment Plan would not be required.

Effectiveness: These measures would allow for the protection of both inadvertent discoveries and known Historic Properties from mining operations, exploration activities, and related indirect impacts. The avoidance protocols described in the PA would be effective in avoiding adverse effects to National Register of Historic Places (NRHP)-eligible resources.

NATIVE AMERICAN TRADITIONAL VALUES

Potential Impact: The Project is near the Tosawihi Quarries Traditional Cultural Properties and the Tosawihi Quarries Archaeological District. The heightened public awareness of the area due to the EIS may create negative impacts to TCPs.

Mitigation Measure NATV-1

Monitoring: The PA (Appendix A) defines the BLM, RCG, and Tribal processes and procedures for monitoring proposed exploration and associated activities, mining and associated operations, site testing, data recovery, and Traditional Cultural Properties throughout the life of the Project.

Mitigation: For both the Mining Area of Potential Effect (APE) and the Exploration APE, the PA describes the type and priority of mitigation tools (i.e., avoidance, denial of access, treatment, and data recovery) and the processes and protocols under which those tools would be implemented. The mitigation types as defined cover known, inadvertent discovery, or other impacts to Historic and Traditional Cultural Properties.

Effectiveness: The BLM acknowledges that certain impacts cannot be fully mitigated to the satisfaction of the Tribes. While possible mitigation measures may lessen certain impacts, adverse effects to religious, spiritual, or sacred values cannot be monitored or mitigated. The monitoring and mitigation processes, procedures, and protocols as defined within the PA and in coordination with Tribes are designed to address issues raised by the Tribes during consultation and may continue to be adjusted by the BLM based on continuing consultation. Therefore, mitigation for Native American traditional values and beliefs would probably be considered as ineffective by Tribes.

New Mitigation Measure NATV-2

Mitigation*:* As an additional measure, RCG would not propose mining or exploration activity within 250 feet of any currently identified TCP area.

Where applicable in the mining operations and exploration activities, RCG would utilize night lighting reduction techniques and equipment, as needed.

Effectiveness: By providing a buffer area around identified TCP areas, this measure is an effective means to further reduce impacts from temporary exploration activities and

mining operations. However, the Tribes may regard this mitigation as an ineffective means of mitigating Native American traditional values and beliefs.

Use of night lighting reduction techniques and equipment would reduce the visual impacts of lighting at the mine site in the night sky allowing for a more natural environmental experience. This mitigation measure can be effective in reducing artificial lighting during the darkness of the night.

REFERENCES

Bureau of Land Management (BLM). 2011a. Greater Sage-Grouse Interim Management Policies and Procedures. Instruction Memorandum No. 2012-043.

Bureau of Land Management (BLM). 2011b. BLM National Greater Sage-Grouse Land Use Planning Strategy. Instruction Memorandum No. 2012-044.

Connelly, J. W., M.A. Schroeder, A. R. Sands, and C. E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. Wildlife Society Bulletin 28: 967-985.

Figures

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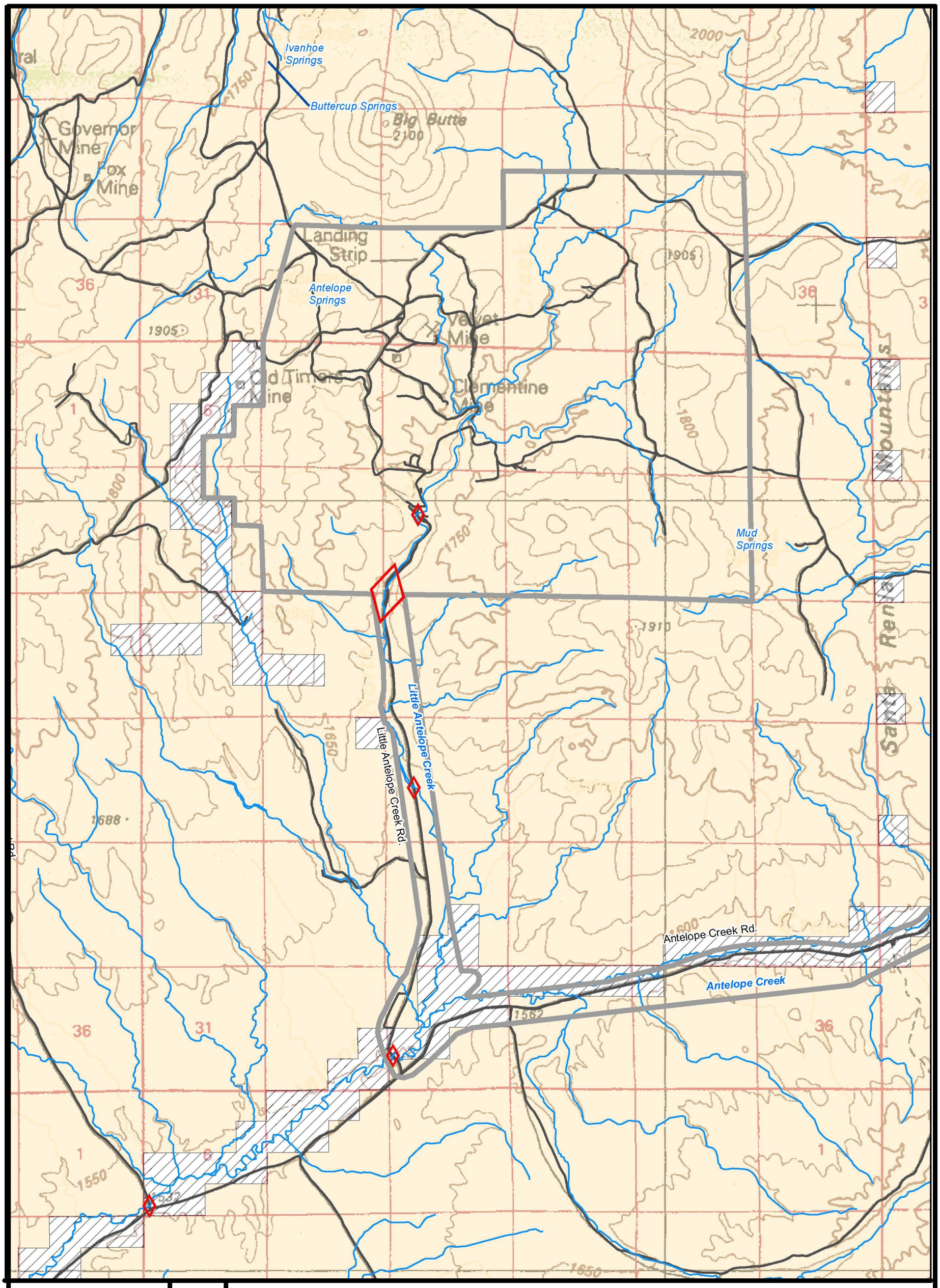


Legend

- Project Area Boundary
- Stream (Intermittent or Ephemeral)
- Road

Surface Ownership

- Bureau of Land Management
- Private

- Road and Stream Intersection

N

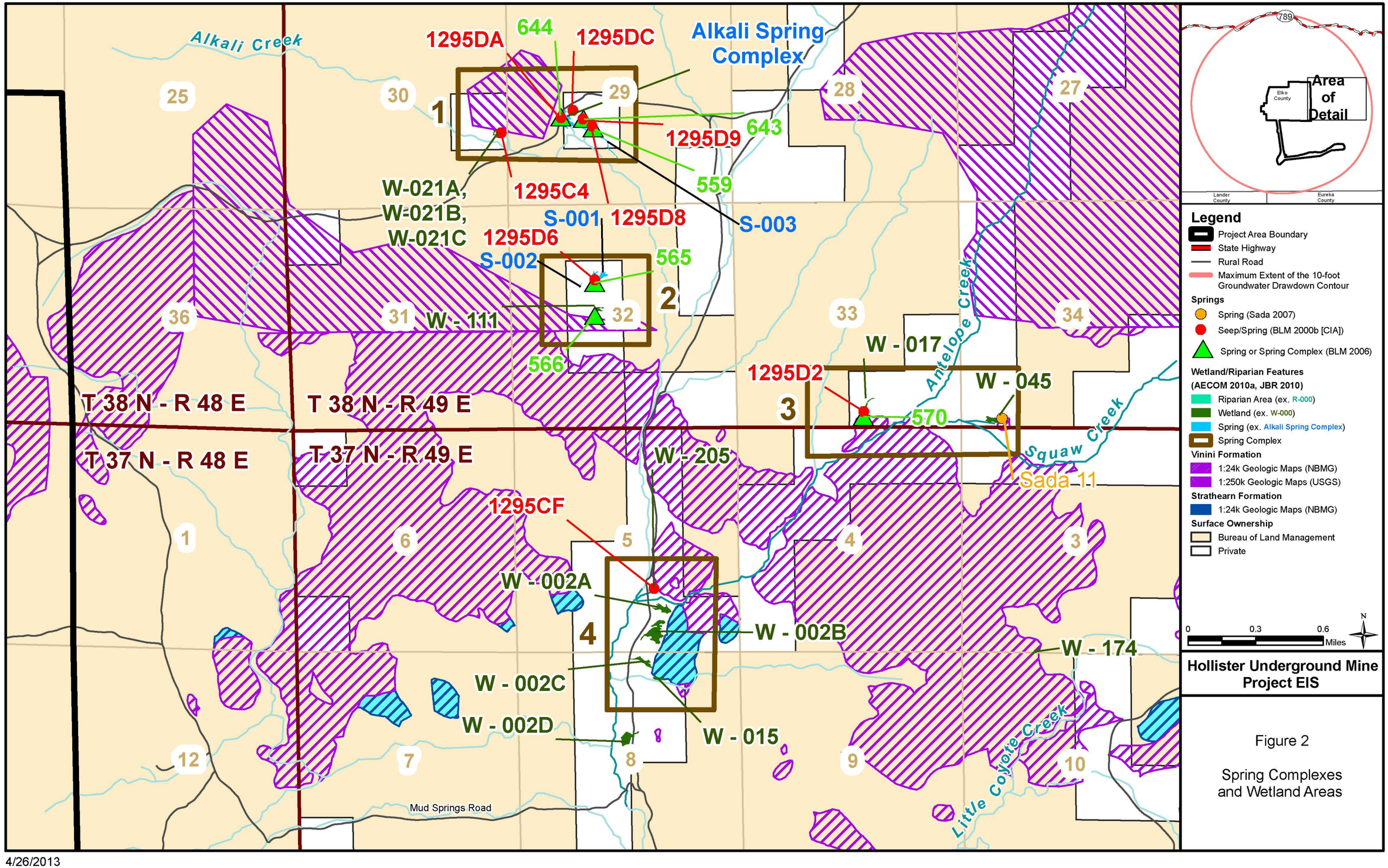
0 0.4 0.8 Miles

Sources: NBMG 2003; USGS 2005.

Hollister Underground Mine Project EIS

Figure 1
Water Crossing Monitoring Locations

5/6/2013



Hollister Underground Mine Project EIS

Figure 2

Spring Complexes and Wetland Areas

4/26/2013

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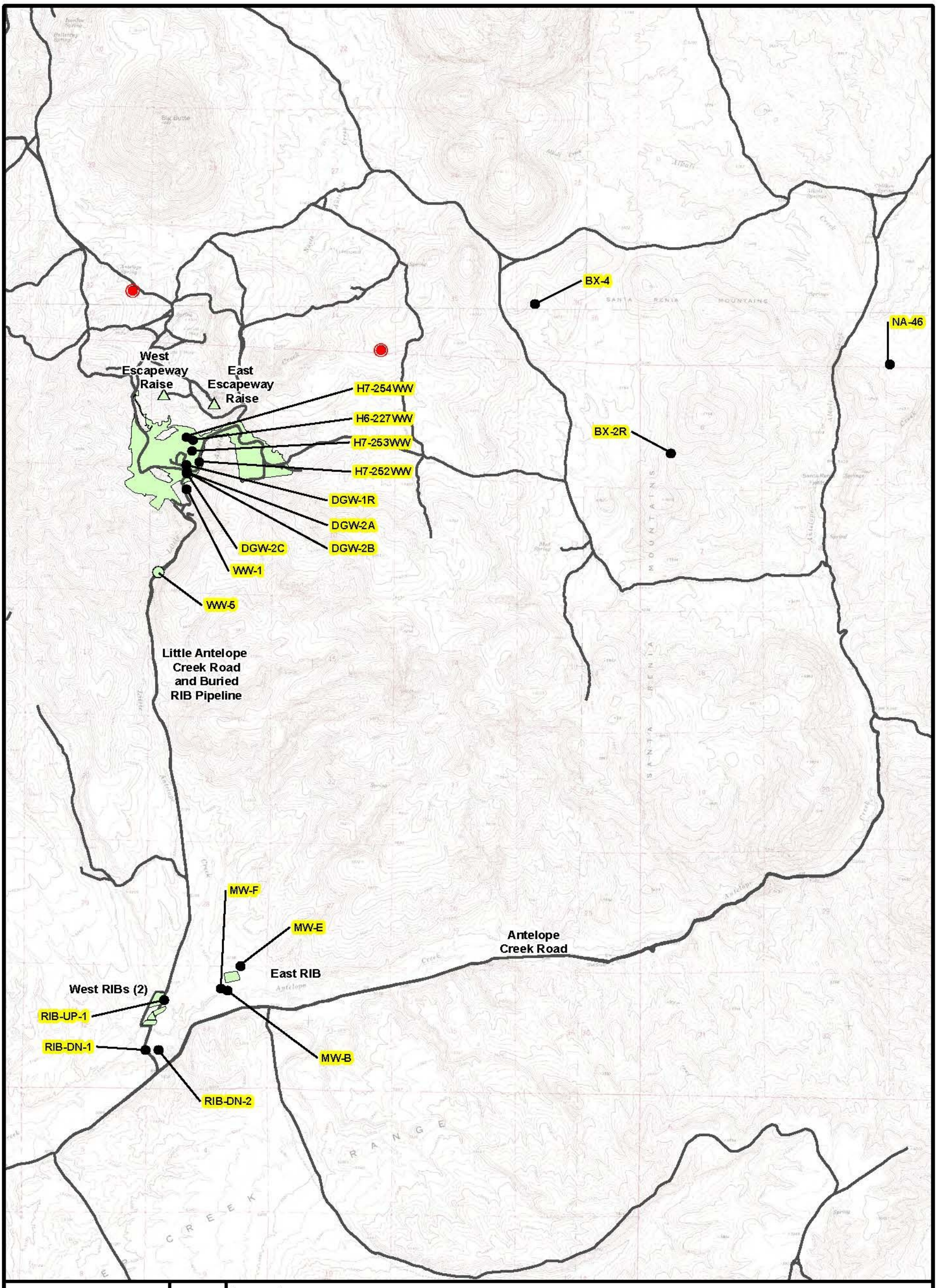


Figure 3
Mine Site Groundwater Monitoring Locations

Hollister Underground Mine Project EIS

Legend

- Roads
- Mining Disturbance
- Water Well
- Escapeway Raise

Monitoring Sites

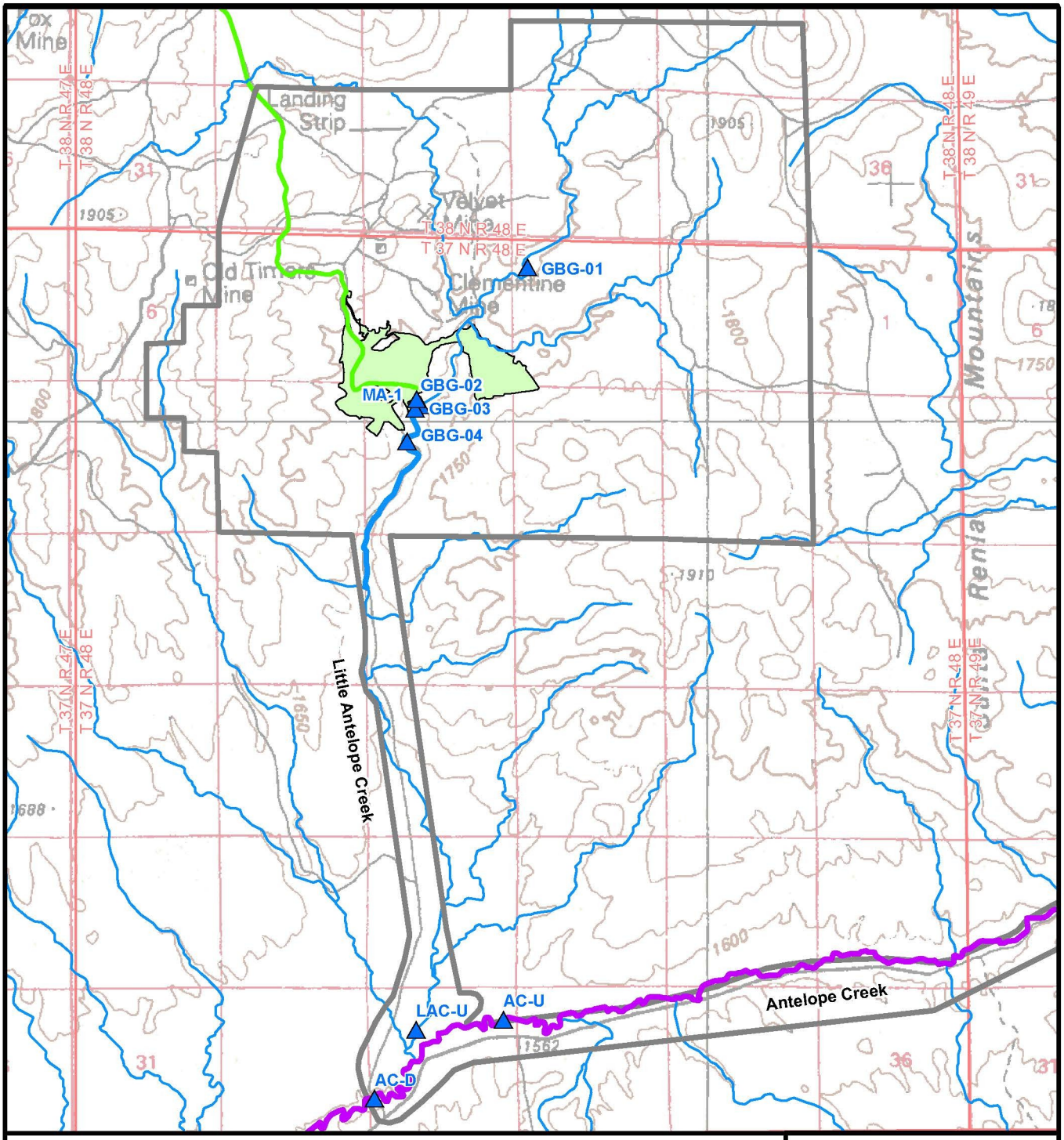
- Monitor Well
- Approximate Location of Proposed New Monitor Well

N

0 0.45 0.9 Miles

Source: Brown and Caldwell 2010a, 2003; Montgomery and Associates 2010a.

4/25/2013



Legend

- Existing Mining Disturbance
- Existing Surface Water Monitoring Locations
- Project Area Boundary
- Stream (Intermittent or Ephemeral)
- Perennial Stream Reach
- Discontinuously Flowing Perennial Reach
- Ivanhoe Road
- Road

Sources: Barrick 2010; BLM 2011b; Montgomery & Associates 2010a.

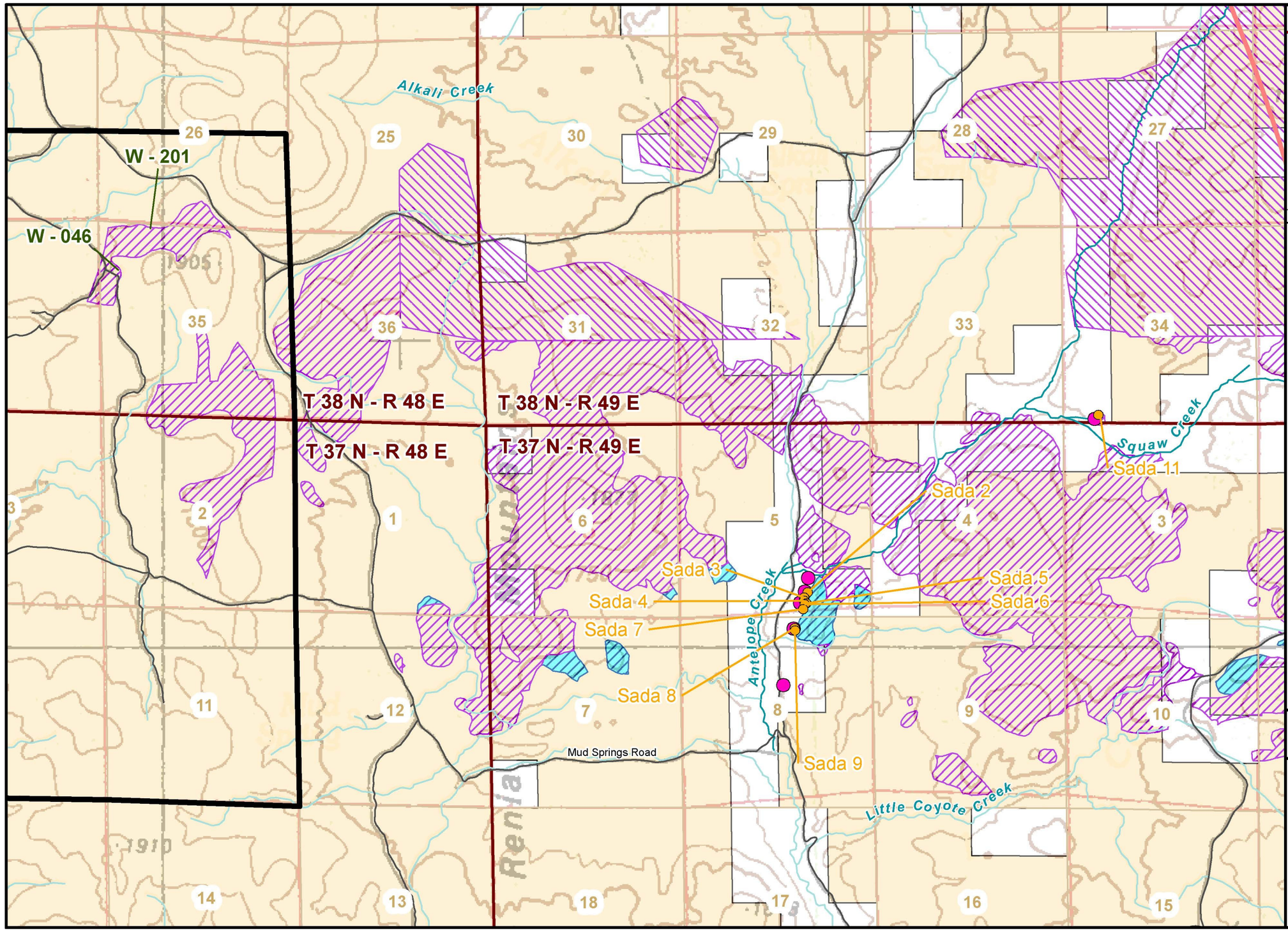
N

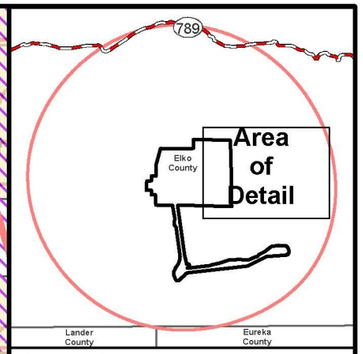
0 0.65 1.3 Miles

Hollister Underground Mine Project EIS

Figure 4

Surface Water Monitoring Locations





Legend

- Project Area Boundary
- State Highway
- Rural Road
- Maximum Extent of the 10-foot Groundwater Drawdown Contour
- Springsnail Location

Springs

- Spring (Sada 2007)

Vinini Formation

- 1:24k Geologic Maps (NBMG)
- 1:250k Geologic Maps (USGS)

Strathearn Formation

- 1:24k Geologic Maps (NBMG)

Surface Ownership

- Bureau of Land Management
- Private

N

0 0.3 0.6 Miles

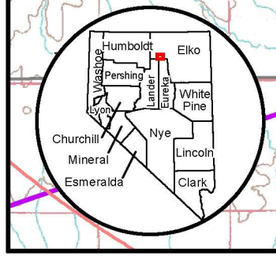
Hollister Underground Mine Project EIS

Figure 5

Potentially Impacted Springsnail Locations

4/23/2013

Big Butte
Active
Ivanhoe Road
East Velvet
Active
E. Clementine
Active
East Pit Facilities
Proposed Mine Office Complex
West Pit
Old Timers Inactive
Proposed NPDES Surface Discharge
Proposed HPS
T38N, R48E
T38N, R49E
T37N, R48E
T37N, R49E
Mud Springs Road
Coyote Creek Substation
Little Antelope Creek Road and Buried RIB Pipeline
Proposed 24.9-kV Transmission Line
Antelope Creek Road
East RIB
West RIBs (2)
Proposed Rodeo Creek Substation
Proposed 120-kV Transmission Line
T37N, R48E
T37N, R49E
T36N, R48E
T36N, R49E



Legend

Existing/Authorized Surface Disturbance or Facilities

- Mining Disturbance
- Rapid Infiltration Basin (RIB)
- Water Well
- Escapeway Raise
- Road
- Ivanhoe Road
- 345-kV Transmission Line
- 120-kV Transmission Line

Proposed Surface Disturbance or Facilities

- Project Area Boundary
- Transmission Line Analysis Corridor
- Mine Office Complex
- NPDES Surface Discharge
- HPS
- 24.9-kV Transmission Line
- 120-kV Transmission Line
- Buried Pipeline
- Maximum Extent of the 10-foot Groundwater Drawdown Contour

Greater Sage-grouse Leks

- Lek Locations (NDOW 04/10)
- 1/4-mile Radius Buffer Lek Location
- 1/2 mile Radius Buffer Lek Location

Source: NDOW 2009a.

N

0 0.6 1.2 Miles

Hollister Underground Mine Project EIS

Figure 6

Greater Sage-grouse Lek Locations within the Study Area

4/11/2013

Attachment A

Water Resources Monitoring and Mitigation Summary

ATTACHMENT A

WATER RESOURCES MONITORING AND MITIGATION SUMMARY

HYDRAULIC FEATURE	WELL/ SPRING/ FEATURE NAME	MONITORING PARAMETERS	FREQUENCY & TIME	FORMATION/ LOCATION	REASON FOR MONITORING	USE OF FEATURE	MONITOR OR MITIGATION TRIGGER	MONITORING OR MITIGATION MEASURE
Groundwater Removal Monitoring	H6-227WW	• Depth to Groundwater • NDEP Profile I	Quarterly	Vinini Formation	To monitor groundwater levels and water quality near active mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters. If the baseline groundwater elevation consistently declines more than 10 feet below the groundwater baseline elevation. The groundwater baseline elevation is determined once the water level stabilizes after drilling.	This well is used to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact. If the groundwater elevation reaches the monitor trigger then additional monitoring would consist of installing step-out monitoring wells and/or piezometers. The well locations would be determined in consultation with the BLM and NDEP.
	H7-252WW	• Depth to Groundwater • NDEP Profile I	Quarterly	Vinini Formation	To monitor groundwater levels and water quality near active mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters. If the baseline groundwater elevation consistently declines more than 10 feet below the groundwater baseline elevation. The groundwater baseline elevation is determined once the water level stabilizes after drilling.	This well is used to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact. If the groundwater elevation reaches the monitor trigger then additional monitoring would consist of installing step-out monitoring wells and/or piezometers. The well locations would be determined in consultation with the BLM and NDEP.
	H7-253WW	• Depth to Groundwater • NDEP Profile I	Quarterly	Vinini Formation	To monitor groundwater levels and water quality near active mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters. If the baseline groundwater elevation consistently declines more than 10 feet below the groundwater baseline elevation. The groundwater baseline elevation is determined once the water level stabilizes after drilling.	This well is used to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact. If the groundwater elevation reaches the monitor trigger then additional monitoring would consist of installing step-out monitoring wells and/or piezometers. The well locations would be determined in consultation with the BLM and NDEP.
	H7-254WW	• Depth to Groundwater • NDEP Profile I	Quarterly	Vinini Formation	To monitor groundwater levels and water quality near active mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters. If the baseline groundwater elevation consistently declines more than 10 feet below the groundwater baseline elevation. The groundwater baseline elevation is determined once the water level stabilizes after drilling.	This well is used to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact. If the groundwater elevation reaches the monitor trigger then additional monitoring would consist of installing step-out monitoring wells and/or piezometers. The well locations would be determined in consultation with the BLM and NDEP.

HYDRAULIC FEATURE	WELL/ SPRING/ FEATURE NAME	MONITORING PARAMETERS	FREQUENCY & TIME	FORMATION/ LOCATION	REASON FOR MONITORING	USE OF FEATURE	MONITOR OR MITIGATION TRIGGER	MONITORING OR MITIGATION MEASURE
	DGW-2C	• Depth to Groundwater • NDEP Profile I	Quarterly	Vinini Formation	To monitor groundwater levels and water quality near active mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters. If the baseline groundwater elevation consistently declines more than 10 feet below the groundwater baseline elevation. The groundwater baseline elevation is determined once the water level stabilizes after drilling.	This well is used to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact. If the groundwater elevation reaches the monitor trigger then additional monitoring would consist of installing step-out monitoring wells and/or piezometers. The well locations would be determined in consultation with the BLM and NDEP.
	BX-4s (Barrick Well)	• Depth to Groundwater	Quarterly	Vinini Formation	To monitor groundwater levels in outlying areas of the 10-foot drawdown contour; Monitoring well for Barrick project; data from this well will be provided to RCG's contractors to refine the groundwater model	N/A	Well BX-4s has a current groundwater elevation of approximately 5,600 feet. The mitigation trigger elevation is 5,588 feet above mean level (aml) or a consistent decline in groundwater elevation of more than 10 feet below the baseline elevation.	If BX-4s reaches the trigger elevation for this well then RCG shall establish a new monitoring well or piezometer at an appropriate location (determined by the BLM in coordination with RCG) between the impacted Barrick well and the spring complex(es).
	BX-2Rs (Barrick Well)	• Depth to Groundwater	Quarterly	Vinini Formation	To monitor groundwater levels in outlying areas of the 10-foot drawdown contour; Monitoring well for Barrick project; data from this well will be provided to RCG's contractors to refine the groundwater model	N/A	Well BX-2Rs has a current groundwater elevation of approximately 5,500 feet. The mitigation trigger elevation is 5,490 feet above mean level (aml) or a consistent decline in groundwater elevation of more than 10 feet below the baseline elevation.	If BX-2Rs reaches the trigger elevation for this well then RCG shall establish a new monitoring well or piezometer at an appropriate location (determined by BLM in coordination with RCG) between the impacted Barrick well and the spring complex(es).
	NA-46 (Barrick Well)	• Depth to Groundwater	Quarterly	Vinini Formation	To monitor groundwater levels in outlying areas of the 10-foot drawdown contour; Monitoring well for Barrick project; data from this well will be provided to RCG's contractors to refine the groundwater model	N/A	None	None
	New Well No.1 (North of underground workings)	• Depth to Groundwater • NDEP Profile I	Quarterly	Vinini Formation	To monitor groundwater levels in outlying areas of the 10-foot drawdown contour	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters. If the baseline groundwater elevation consistently declines more than 10 feet below the groundwater baseline elevation. The groundwater baseline elevation is determined once the water level stabilizes after drilling.	This well is used to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact. If the groundwater elevation reaches the monitor trigger then additional monitoring would consist of installing step-out monitoring wells and/or piezometers. The well locations would be determined in consultation with the BLM and NDEP.
	New Well	• Depth to	Quarterly	Vinini	To monitor groundwater	N/A	If monitoring shows water quality exceedances	This well is used to continue to evaluate and refine the

HYDRAULIC FEATURE	WELL/ SPRING/ FEATURE NAME	MONITORING PARAMETERS	FREQUENCY & TIME	FORMATION/ LOCATION	REASON FOR MONITORING	USE OF FEATURE	MONITOR OR MITIGATION TRIGGER	MONITORING OR MITIGATION MEASURE
	No. 2 (Northeast of underground workings)	Groundwater • NDEP Profile I		Formation	levels in outlying areas of the 10-foot drawdown contour		significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters. If the baseline groundwater elevation consistently declines more than 10 feet below the groundwater baseline elevation. The groundwater baseline elevation is determined once the water level stabilizes after drilling.	models. If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact. If the groundwater elevation reaches the monitor trigger then additional monitoring would consist of installing step-out monitoring wells and/or piezometers. The well locations would be determined in consultation with the BLM and NDEP.
TCP Springs	Ivanhoe Springs	• Flow • NDEP Profile I	Annually, in the Fall	Tertiary Volcanics	Although this TCP spring is not sourced in the Vinini Formation and is not expected to be impacted by groundwater removal or mining operations, it is being monitored because of its significance as a TCP.	Western Shoshone cultural uses	No impact is anticipated; results will be reported to the BLM to assist with management of this TCP	N/A
	Buttercup Springs	• Flow • NDEP Profile I	Annually, in the Fall	Tertiary Volcanics	Although this TCP spring is not sourced in the Vinini Formation and is not expected to be impacted by groundwater removal or mining operations, it is being monitored because of its significance as a TCP.	Western Shoshone cultural uses	No impact is anticipated; results will be reported to the BLM to assist with management of this TCP	N/A
	Antelope Springs	• Flow • NDEP Profile I	Annually, in the Fall	Tertiary Volcanics	Although this TCP spring is not sourced in the Vinini Formation and is not expected to be impacted by groundwater removal or mining operations, it is being monitored because of its significance as a TCP.	Western Shoshone cultural uses	No impact is anticipated; results will be reported to the BLM to assist with management of this TCP	N/A
Surface Water Monitoring	GBG-01	• Flow • NDEP Profile I	Quarterly	Little Antelope Creek	Monitoring surface water quality upstream from the mining operations and MA-1 seep to determine background conditions in Little Antelope Creek	N/A	Monitors upstream from previous mining activities. If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	No impacts are anticipated at this site. If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact.
	GBG-02	• Flow • NDEP Profile I	Quarterly	Little Antelope Creek	Monitoring surface water quality upstream from the mining operations and MA-1 seep to determine background conditions in Little Antelope Creek	N/A	Monitors upstream from previous mining activities. If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	No impacts are anticipated at this site. If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact.
	GBG-03	• Flow	Quarterly	Little	Monitoring surface water	N/A	Monitors impacts from previous mining activities. If	The proposed mitigation for MA-1 seep would be

HYDRAULIC FEATURE	WELL/ SPRING/ FEATURE NAME	MONITORING PARAMETERS	FREQUENCY & TIME	FORMATION/ LOCATION	REASON FOR MONITORING	USE OF FEATURE	MONITOR OR MITIGATION TRIGGER	MONITORING OR MITIGATION MEASURE
		• NDEP Profile I		Antelope Creek	quality downstream from the mining operations and MA-1 seep. It will determine if impaired water from the MA-1 seep is reaching Little Antelope Creek.		monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	implemented. If other impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact.
	GBG-04	• Flow • NDEP Profile I	Quarterly	Little Antelope Creek	Monitoring surface water quality downstream from the mining operations and MA-1 seep. It will determine if impaired water from the MA-1 seep is reaching Little Antelope Creek.	N/A	Monitors impacts from previous mining activities. If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	The proposed mitigation for MA-1 seep would be implemented. If other impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact.
	MA-1	• Flow • NDEP Profile I	Quarterly	East Waste Rock Storage Facility	Monitoring MA-1 seep will determine if impaired water from the MA-1 seep may reach Little Antelope Creek.	N/A	Monitors impacts from previous mining activities. If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	The proposed mitigation for the MA-1 seep would be implemented. If other impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact.
	LAC-U	• Flow • NDEP Profile I		RIBs	Monitoring surface water in proximity to the West RIBs		Monitors impacts from Rapid Infiltration Basin (RIB). If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact.
	AC-U	• Flow • NDEP Profile I	Quarterly	RIBs	Monitoring surface water quality in proximity to East RIBs	N/A	Monitors impacts from Rapid Infiltration Basin (RIB). If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact.
	AC-D	• Flow • NDEP Profile I	Quarterly		Monitoring surface water quality in proximity to West RIBs	N/A	Monitors impacts from Rapid Infiltration Basin (RIB). If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact.
Water Quality Monitoring – Wells	WE-1	• NDEP Profile I • Depth to Groundwater	Quarterly	Tertiary Volcanics	Monitoring groundwater quality will indicate if groundwater is being impaired by mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters. If the baseline groundwater elevation consistently declines more than 10 feet below the groundwater baseline elevation. The groundwater baseline elevation is determined once the water level stabilizes after drilling.	This well is to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with BLM and NDEP, and would depend on the identified impact. If the groundwater elevation reaches the monitor trigger then new monitoring wells would be installed to track upward propagation. Well locations would be determined in consultation with the BLM and NDEP.

HYDRAULIC FEATURE	WELL/ SPRING/ FEATURE NAME	MONITORING PARAMETERS	FREQUENCY & TIME	FORMATION/ LOCATION	REASON FOR MONITORING	USE OF FEATURE	MONITOR OR MITIGATION TRIGGER	MONITORING OR MITIGATION MEASURE
	DGW-1R	• NDEP Profile I • Depth to Groundwater	Quarterly	Tertiary Volcanics	Monitoring groundwater quality will indicate if groundwater is being impaired by mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters. If the baseline groundwater elevation consistently declines more than 10 feet below the groundwater baseline elevation. The groundwater baseline elevation is determined once the water level stabilizes after drilling.	This well is to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with BLM and NDEP, and would depend on the identified impact. If the groundwater elevation reaches the monitor trigger then new monitoring wells would be installed to track upward propagation. Well locations would be determined in consultation with the BLM and NDEP.
	DGW-2A	• NDEP Profile I • Depth to Groundwater	Quarterly	Waste Rock	Monitoring groundwater quality will indicate if groundwater is being impaired by mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	This well is to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with BLM and NDEP, and would depend on the identified impact.
	DGW-2B	• NDEP Profile I • Depth to Groundwater	Quarterly	Tertiary Volcanics	Monitoring groundwater quality will indicate if groundwater is being impaired by mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters. If the baseline groundwater elevation consistently declines more than 10 feet below the groundwater baseline elevation. The groundwater baseline elevation is determined once the water level stabilizes after drilling.	This well is to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with BLM and NDEP, and would depend on the identified impact. If the groundwater elevation reaches the monitor trigger then new monitoring wells would be installed to track upward propagation. Well locations would be determined in consultation with the BLM and NDEP.
	DGW-2C	• Depth to Groundwater • NDEP Profile I	Quarterly	Vinini Formation	Monitoring groundwater quality will indicate if groundwater is being impaired by mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters. If the baseline groundwater elevation consistently declines more than 10 feet below the groundwater baseline elevation. The groundwater baseline elevation is determined once the water level stabilizes after drilling.	This well is used to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact. If the groundwater elevation reaches the monitor trigger then additional monitoring would consist of installing step-out monitoring wells and/or piezometers. The well locations would be determined in consultation with the BLM and NDEP.
	MW-E	• NDEP Profile I • Depth to Groundwater	Monthly	Quaternary Alluvium	Monitoring groundwater quality will indicate if groundwater is being impaired by mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	This well is to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with the BLM and NDEP, and would depend on the identified impact.
	MW-F	• NDEP Profile I • Depth to Groundwater	Monthly	Quaternary Alluvium	Monitoring groundwater quality will indicate if groundwater is being impaired by mining	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	This well is to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with BLM and NDEP, and would depend on the identified impact.

HYDRAULIC FEATURE	WELL/ SPRING/ FEATURE NAME	MONITORING PARAMETERS	FREQUENCY & TIME	FORMATION/ LOCATION	REASON FOR MONITORING	USE OF FEATURE	MONITOR OR MITIGATION TRIGGER	MONITORING OR MITIGATION MEASURE
					operations			
	MW-B	• NDEP Profile I • Depth to Groundwater	Monthly	Quaternary Alluvium	Monitoring groundwater quality will indicate if groundwater is being impaired by mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	This well is to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with BLM and NDEP, and would depend on the identified impact.
	RIB-UP-1	• NDEP Profile I • Depth to Groundwater	Quarterly	Quaternary Alluvium	Monitoring groundwater quality will indicate if groundwater is being impaired by mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	This well is to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with BLM and NDEP, and would depend on the identified impact.
	RIB-DN-2	• NDEP Profile I • Depth to Groundwater	Quarterly	Quaternary Alluvium	Monitoring groundwater quality will indicate if groundwater is being impaired by mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	This well is to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with BLM and NDEP, and would depend on the identified impact.
	RIB-DN-1	• NDEP Profile I • Depth to Groundwater	Quarterly	Quaternary Alluvium	Monitoring groundwater quality will indicate if groundwater is being impaired by mining operations	N/A	If monitoring shows water quality exceedances significantly above existing conditions. See the Water Pollution Control Permit regarding water quality parameters.	This well is to continue to evaluate and refine the models. If impacts are detected, mitigation would be determined in consultation with BLM and NDEP, and would depend on the identified impact.

Attachment B

BLM Pesticide Application Record

ATTACHMENT B

BUREAU OF LAND MANAGEMENT PESTICIDE APPLICATION RECORD

1. a. Project Name: _____

   b. Operator: _____

   c. Pesticide Use Proposal Number: _____

   d. Reference Number: _____

2. Name of Applicator of Employee(s) Applying the Pesticide:

   _____ _____ _____

   _____ _____ _____

3. Date(s) of Application: _____
   (MONTH, DAY, YEAR)

4. Time Frame of Application: _____

5. Location of Application: _____

   County: _____

6. Type of Equipment Used: _____
7. Pesticide (s) Used:
   a. Company or Manufacturer's Name: _____

   b. Trade Name _____

   c. Type of Formulation: Liquid __ ___/ Granular _____/

8. Rate of Application Used:
   a. Active Ingredient per Acre: _____

   b. Volume of Formulation per Acre: _____

9. a. Actual Area Treated: _____

   b. Total Project Area: _____

10. Primary Pest(s) Involved: _____

11. Stage of Pest Development: _____

12. Site Treated: _/ Native Vegetation __/ Seeded Vegetation _/ Other

13. Weather Conditions: a. Wind Direction:_____ b. Wind velocity: _____ c. Temp. _____

14. Monitoring Record: (if insufficient space-continue on back): _____

This Record is required and must be completed for monitoring within 24 hours after completion of application of pesticides. This record must be maintained for a minimum of 10 years.

Protocol A

Groundwater Monitoring Schedule, Testing Criteria, and Reporting Procedure

PROTOCOL A

Groundwater Monitoring Schedule, Testing Criteria, and Reporting Procedure

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Monitoring Start Dates and Duration of Monitoring:

Well Number or Name	Start Date	Duration
H6-227WW H7-252WW H7-253WW H7-254WW W-E-1 DGW-1R DGW-2A DGW-2B DGW-2C RIB DN-1 RIB DN-2 RIB UP-1	The quarter following the issuance of the Project approval and quarterly thereafter	Life of Mine (including reclamation and closure)
WW-5	The year following the issuance of the Project approval and annually thereafter	Life of Mine (including reclamation and closure)
MW-B MW-E MW-F	The beginning month following the issuance of the Project approval and monthly thereafter	Life of Mine (including reclamation and closure)
New Well No. 1 (North)	The quarter following completion of the well and quarterly thereafter	Completion of the well through reclamation and closure/Life of mine
New Well No. 2 (Northeast)	The quarter following completion of the well and quarterly thereafter	Completion of the well through reclamation and closure/life of mine

Frequency of Monitoring: WW-5 will be monitored annually. MW-B, MW-E and MW-F will be monitored monthly. All other monitoring wells will be monitored quarterly.

Data Submission and Monitoring Report:

Report Due Date: Provided to the BLM annually by April 30 each year following the data collection the prior year.

Water Quantity Testing Protocol and Data:

- Hydrographs showing the base groundwater level, monthly/ quarterly/annual recorded levels and the groundwater trigger level.
- Comprehensive electronic water level files

Water Quality Testing:

- NDEP Profile 1 Standards
- Data will be presented in spreadsheet format and will include: well identification, date and time of sampling and the testing results for each constituent.

Monitoring and Static Water Level Sampling Procedures for Groundwater:

Collection of Water Samples/Depth To Water (DTW) Data:

- Wear personal protective equipment, as needed. At a minimum, a clean pair of gloves should be worn for each sample. Gloves should be changed if contamination has occurred during the sampling event.
- Take care to avoid contamination of the containers and lids during sampling. A separate container or bag can be used to avoid placing bottles or exposed lids directly on the ground. Avoid touching the inside of the containers or lids with your fingers or any sampling equipment.
- Rinse the water level indicator tape probe and first ten feet of tape with distilled water. Lower the indicator tape inside the small PVC pipe (sounding tube) located inside the well casing until the alarm sounds, indicating you have hit water. Measure the depth to water (DTW) from the top of the well casing. Record the static water level on the sampling log to the one-hundredths of a foot. Carefully remove tape from the well.
- Set up sampling apparatus by connecting PVC pipe to connection inside the well casing. Set a cleaned (rinsed) bucket underneath the PVC pipe to collect and measure water.
- Prepare to pump water by:
    - Completing a pre-inspection checklist for the generator.

    - Plug in female end of extension cord into male plug mounted at each well. Do not plug into the generator at this time.
    - Turn on fuel supply for generator.
    - Choke generator (if cold)
    - Start generator using pull cord and allow it to warm up for 1-3 minutes.
    - Plug in extension cord to begin pumping.
- Allow water to pump based on historic volume purges (for some wells this may be 10 gallons, for others it may be 100 gallons). Pumped water should be distributed to the surrounding area, away from the sampling location. Prior to sampling, fill a clean, non-preserved bottle, beaker or graduated cylinder with water and measure the pH, EC and Temperature using the multi-parameter meter. Record these values on the sampling log.
- Record the date/time of the sample and fill the pre-labeled sample containers. For bottles that contain preservatives, these will be contained in a separate vial except for the bottles containing sodium hydroxide (NaOH). NaOH will be present directly in the bottles in the form of pellets. If applicable, remove the vial, fill the sample container with water and then empty the contents of the preservative vial into the sample container. Take care not to overfill any of the sample containers, especially the bottles containing NaOH. FOR DISSOLVED METALS: fill the field filtering bottle with unpreserved sample water and attach hand pump to the filter bottle, apply a vacuum using the hand pump and allow sample to filter through the 0.45 μm filter. Pour the filtered sample into the sample container and add the preservative.
    - If you do not have field filtering bottles, DO NOT preserve the metals aliquot. The lab can filter and preserve for metals ONLY.
- Place filled sample containers in the cooler, ensuring all the lids are secure.
- Turn off the generator and disconnect extension cord, store in the vehicle. Remove sampling apparatus and store in the vehicle. Replace well cap.

- Repeat for each well. Follow Sample Transport & Shipment Guidelines.

Sample Transport & Shipment Guidelines:

After a sampling even takes place, the samples will need to be transported to a Nevada certified laboratory within EPA recommended holding times (allow for a minimum 24 hour buffer, if possible, for the laboratory to process the samples).

Prior to the transport of the samples by any of the approved methods, the following steps should be taken to ensure the samples are received in a complete and organized fashion by the laboratory:

- Ensure that all sample containers are present and are labeled completely and properly.
    - Sample bottles from each location should be placed inside a Ziploc bag, in an upright position.
- Ensure that the Sampling Log has been filled out completely and properly.
- Ensure that the Chain of Custody has been filled out completely and properly. Place the Chain of Custody inside a Ziploc bag and place it inside the cooler with the samples.
    - If the courier will be delivering the samples or you will be shipping them, tear off the pink copy of the Chain of Custody and keep in the Environmental Department's records. If a company employee is delivering the samples, they will receive the pink copy at the time of delivery.
- All samples should be placed securely inside a cooler in an upright position. NEVER LAY SAMPLE CONTAINERS ON THEIR SIDE.
- Using frozen ice packs, or ice placed inside Ziploc bags, pack the samples to ensure they will be maintained at 4°C until they are received at the laboratory. NEVER PUT LOOSE ICE IN THE COOLER. IT CAN POTENTIALLY CONTAMINATE THE SAMPLES AND ALL SHIPPING VENDORS WILL RETURN THE COOLER OR HOLD IT FOR INSPECTION IF THEY DETECT LEAKS.

Data Validation:

Immediately upon receipt of the laboratory results, all field and lab data will be evaluated and independent assessments of data accuracy will be completed. Independent checks of data accuracy are performed by the Environmental Department and the laboratory staff is notified if values are identified that are outside the existing data trends for any parameter, or if there is a potential for an exceedance of any permit condition. Upon positive confirmation of an outlier or anomaly, the laboratory will be instructed to re-analyze the sample. If the sample data comes back the same as the original analysis, then the monitoring location will be re-sampled. If the resample analysis confirms the original sample, RCG will report to necessary agencies. It's important to look at the data immediately when received from the lab in case we have to rerun a sample within an accepted holding period.

Protocol B

Monitoring Schedule, Testing Criteria, and Reporting Procedure
Surface Water, TCP Springs, and MA-1 Seep

PROTOCOL B

Monitoring Schedule, Testing Criteria, and Reporting Procedure
Surface Water, TCP Springs, and MA-1 Seep

Monitoring Start Dates and Duration of Monitoring: The third quarter or first fall after the issuance of the Project approval through closing and reclamation.

Frequency of Monitoring: Quarterly at existing surface water monitoring locations. All other locations will be monitored annually in the fall.

Data Submission and Monitoring Report:

Report due date: Annually, due by April 30 each year following the data collection the prior fall.

Water Quantity Testing:

- Permanent monitoring stations using a t-post with GPS coordinates
- Field measured items: flow rate, specific conductance, pH, dissolved oxygen, temperature and depth to water.

Water Quality Testing:

- NDEP Profile 1 Standards

Monitoring Procedures for Surface Water Quality:

Water Sampling:

- Wear personal protective equipment, as needed. At a minimum, a clean pair of gloves should be worn for each sample. Gloves should be changed if contamination has occurred during the sampling event.
- Take care to avoid contamination of the containers and lids during sampling. A separate container or bag can be used to avoid placing bottles or exposed lids directly on the ground. Avoid touching the inside of the containers or lids with your fingers or any sampling equipment.
- Record the date/time of the sample and fill the pre-labeled sample containers. For bottles that contain preservatives, these will be contained in a separate vial except for the bottles containing sodium hydroxide (NaOH). NaOH will be present directly in the bottles in the form of pellets. If applicable, remove the vial, fill the sample container with water

and then empty the contents of the preservative vial into the sample container. Containers should be filled by placing the bottle at a 45 degree angle, with the opening facing upwards, and allow the water to flow into the bottle. Pull the bottle straight up and out of the water. If you are filling a container that has NaOH, DO NOT place this bottle directly in the water source. The non-preserved bottle should be used to fill the bottle containing NaOH, using care not to touch the bottles necks together. If the water is too shallow to completely submerge the container, an additional clean, non-preserved bottle can be used to fill the sample containers until full. Take care not to overfill any of the sample containers, especially the bottles containing NaOH. FOR DISSOLVED METALS: fill the field filtering bottle with unpreserved sample water and attach hand pump to the filter bottle, apply a vacuum using the hand pump and allow sample to filter through the 0.45 μm filter. Pour the filtered sample into the sample container and add the preservative.

- If you do not have field filtering bottles, DO NOT preserve the metals aliquot. The lab can filter and preserve for metals ONLY.
- Place filled sample containers in the cooler, ensuring all the lids are secure.
- Repeat for each sampling location. Follow guidelines in Section 8.0 Sample Transport & Shipment Guidelines for post-sampling instructions.

Sample Transport & Shipment Guidelines:

Same procedures set forth for Groundwater, above.

Data Validation:

Same procedures set forth for Groundwater, above.

Monitoring Procedures for Surface Water Quantity:

Water Flow Measurements:

- Measuring the velocity of stream flow at flow stations requires the use of a current or flow meter, a tape measure to measure the width of the stream and a wading rod to measure the depth of the water. Rubber boots or waders may be required depending on the depth and width of the channel.
- Select the section of the channel to be measured. The ideal site is in a stable stream channel that does not significantly alter course, depth or flow

with minor environmental changes. The flow within the channel should run parallel to the stream channel orientation and not be interrupted by backwater flows or structures.

- Develop a cross-section of the stream. Measure the width of the stream, extending the cross-section to a point on the opposite bank that is above flood level, if practical. Stretch a measuring tape across the stream from the near bank to the far, so that one-foot intervals can be read quickly. (When measuring a narrow channel a shorter interval of 6” should be used.) Always record the interval width to insure proper calculation of the total flow rate. Also record the total width of the stream. Note any additional observations on the field sheet.

- Cross the stream at the tape and, at each foot mark beginning on the near bank, take a depth measurement and record this information, together with the distance from the near bank.

- Use the depth and width data to draw a rough profile for the stream on the field sheet. Return to the near bank and calculate 60 percent of each depth measured.

- Cross the stream again, lowering the flow meter to the "60 percent of depth" point determined previously. Always stand downstream of the flow meter and avoid standing so close that you interrupt the natural stream flow. Hold the flow meter in the water for 30 to 45 seconds to stabilize, and then record the measurement.

- Average the flow data to determine the flow rate at the monitoring site.